

# ORR-EZ™

A Rating System for Sailboat Handicapping

# **Rule Book**

Revised: December 2, 2023

Published by the

# **Offshore Racing Association**

www.offshoreracingrule.org





Change Log – December 2, 2023	
Rule	Description
II.E.	Add cert renewal rules.
III.A.2	Add reference to cert options.
III.B.2(e,f)	Clarify default sail assumptions.
III.D.1	Short-Handed rated crew weight is set to 370 lbs in all cases.
III.D.2	Short-Handed crews shall be 1 or 2 persons with no applied weight limit.
III.E.2	Clarification of how OD Class rules are used to determine RCW.
III.F.1	Sail inventory limitations are omitted.
III.F.4	Asymmetric spinnaker declared on a pole may also be tacked on centerline.
III.F.5	Wing-and-wing is allowed.
III.F.6	Clarify furling sail declaration requirements.
III.H.2	Add time limit for customer review.
IV.E	Trial certificates require a current certificate.
	# # #

# ORR-EZ™

### **Rules Governing Handicaps and Certificates**

- I. Introduction and Overview
- II. Obtaining a Rating
- III. Handicapping Procedure
  - A. General
  - B. Standard Certificate
  - C. One Design Class Certificate
  - D. Short-Handed Certificate
  - E. Crew Weight
  - F. Sail Limitations
  - G. Auxiliary Propulsion
  - H. The Certificate
- IV. Changes and Adjustments to Handicaps
  - A. General
  - B. Changes in Ownership
  - C. Changes during the Season
  - D. Changes with Renewal
  - E. Trial Certificates
  - F. Rating Appeals
- V. Fees
- VI. Definitions
- VII. Privacy

Appendix A - Certificate Example

2

#### I. Introduction and Overview

- A. The non-profit Offshore Racing Association (ORA) was organized to own, maintain and administer the Offshore Racing Rule (ORR) and the associated ORR Velocity Prediction Program (VPP).
- B. The ORR-EZ handicapping rule was created by the ORA to accommodate regional racers over a full season of racing in all types of regattas. The expense and effort needed to acquire and maintain a valid ORR-EZ rating certificate is significantly less than for full ORR handicapping. Each handicapped boat is issued a valid rating certificate that officially documents the boat's rating as well as key measurements and configuration assumptions.
- C. ORR-EZ has a central core that is based on the latest version of the ORR-EZ VPP that calculates the speed potential of each boat at any combination of wind speed and wind direction. The ORR-EZ VPP is a set of algorithms developed through systematic research that use fundamental scientific methods and is periodically refined and updated by the ORA. ORR-EZ ratings may be adjusted based on observed performance, especially for those boats whose racing abilities may be compromised by a design emphasis on cruising capabilities. These adjustments are applied nationally and are made by the ORR-EZ National Rating Committee, made up of naval architects, designers, sailmakers and other qualified individuals. Requests for rating adjustments should be submitted by sailors to their Regional Representative for forwarding to the committee for review.
- **D.** In this document, the terms "handicap" and "rating" are used interchangeably. The "Organizing Authority" is as defined by the Racing Rules of Sailing (RRS).
- **E. ORR-EZ** handicaps are intended to reflect the potential speed of a boat. Conversely, **ORR-EZ** handicaps are not intended to reflect the ability of skipper and crew. The **ORA** is the Rule and Rating Authority for administration of **ORR-EZ**. The **ORA** is responsible for the development, promotion and implementation of the rule.
- **F.** Primary speed factors are determined from existing measurement databases of production boats and simple sail measurements. The data is run through the **ORR-EZ VPP** to produce certificates. In some cases where the boat design is not competitive, subjective corrections can be made by the National Rating Committee.
- **G.** Race organizers may select from ratings for various scoring systems, courses, wind speeds and race specific ratings as shown on the Certificate Example in Appendix A.
- H. <u>Safety requirements are not part of this Rule Book. It is the Organizing Authority's responsibility to address safety.</u>

#### II. Obtaining a Rating

- **A.** To obtain a new rating certificate or a renewal of an existing certificate, individuals shall complete and submit the appropriate application, which can be found via the **ORA** web site at <a href="https://www.offshoreracingrule.org/orr-ez">https://www.offshoreracingrule.org/orr-ez</a> or the QR code shown on the cover page.
- **B.** Applications are not complete unless accompanied by the required fees. Central to generating a new certificate for a boat, is the hull's Offset File. For boats with an Offset File already in the database, certificates are typically completed within a few days. Certificates for boats not in the database will typically take longer. Due to the additional work required, there is a one-time fee for the creation of a new Offset File.

- C. Boats are allowed up to three (3) concurrent valid certificates, as follows:
  - 1. Standard or One-Design Class Certificate.
  - 2. Standard Certificate (alternate configuration).
  - 3. Short-Handed Certificate.
- **D.** Unless specifically allowed by the Organizing Authority (not recommended), a boat shall not use more than one rating certificate during any given regatta or series.
- **E.** All certificates expire after December 31st of their VPP version year. Certificates shall only be renewed within two (2) calendar years after expiry. Certificates may be renewed prior to expiry if the new VPP version is made available for processing.

### III. Handicapping Procedure

#### A. General

- The definitions and technical descriptions in the current ORR Rules shall apply to these rules.
- Various hull, rig and other configuration options are presented on the certificate application for selection by the applicant. If a desired option is not available, the National Rating Committee must be consulted to complete the handicapping.
- 3. In assigning a rating, **ORR-EZ** may use any data sources that the handicappers deem appropriate including, but not limited to:
  - (a) measurements of the boat's sails and rig data as supplied by the applicant, **ORR** measurer, sailmaker, or **ORR-EZ** regional representative;
  - (b) hull file geometry as supplied from the **ORA** data base or a constructed hull file;
  - (c) displacement data as supplied by the manufacturer or as weighed in lightship configuration or as is contained in the **ORA** default data file;
  - (d) one-design class rules:
  - (e) observed performance and race results of the boat or other boats that are similar;
  - (f) boat configuration data maintained by ORA;
  - (g) ratings for the same or similar boats in other areas of the country.
- 4. **ORR-EZ** assumes a boat is equipped to race. There are no allowances made for boats in non-race configuration.

#### **B.** Standard Certificate

- 1. Boats shall meet the following characteristics for their certificate to be valid:
  - (a) moveable ballast boats are permitted;
  - (b) spars shall be banded (black band on white spars, white band on black spars) for the proper P (mainsail luff) and E (mainsail foot) dimensions listed on the **ORR-EZ** certificate;
  - (c) Ketch and Yawl rigs will have PY and EY banded.
- 2. Handicaps further assume that, unless reported otherwise:
  - (a) for boats with symmetric spinnakers, the SPL is equal to J or manufacturers specifications, default spinnaker girths (SMW, SF) will be taken as 180% of SPL;
  - (b) for boats with asymmetric spinnakers, default spinnaker girths (AMG, ASF) will be taken as 175% of TPS or manufacturer base boat specifications;
  - (c) the default spinnaker luff is taken as 0.95 x (ISP^2 + (SPL or TPS)^2)^.5;
  - (d) the default genoa LP dimension is equal to 155% of the J dimension;
  - (e) Code Zero spinnakers are allowed;

#### (f) a Large Roach Headsail (LRH) is not carried;

- (g) a Whisker Pole attached to the mast for sheeting a headsail or asymmetric spinnaker tacked on centerline is allowed;
- (h) the hull and appendages are unmodified from the manufactured version, except that an owner may fair the hull, keel, and rudder to original design specifications without penalty;
- (i) the interior is in the configuration that comes standard from the manufacturer.
- 3. The owner shall declare any modifications or exceptions to the manufactured configuration of the boat and may declare sail measurements.

#### C. One-Design Class Certificate

- ORR-EZ may, at its discretion, offer One-Design (OD) certificates for established OD Classes
  and also for groups of owners with boats with a given hull design, and that agree upon the
  size of sails and other equipment required to compete.
- 2. OD Class restrictions apply only to the standard configuration, measurement data and parameters taken from the OD Class rules including, but not limited to, hull, rig, sails, crew weight and required equipment.
- 3. Conformity with other OD Class rules is not required by these rules.

#### D. Short-Handed Certificate

- 1. Boats shall meet the requirements of a Standard certificate except that the rated crew weight shall be 370 lbs. and it is assumed that the boat is configured for short-handed sailing.
- Unless stated otherwise in the race documents, boats registered with a Short-Handed certificate shall be limited to one or two crew persons and rule III.E.3 shall not apply. The Organizing Authority may restrict the eligibility of short-handed entries.

#### E. Crew Weight

- The Rated Crew Weight (RCW) shall be either the default Base Crew Weight (BCW) as determined by the ORR-EZ VPP or a declared crew weight submitted by the owner in the application process.
- 2. For One-Design certificates, the OD Class rules regarding maximum crew weight shall determine the RCW. OD classes without maximum crew weight rules shall be assigned an appropriate RCW.
- 3. The RCW shall be the Maximum crew weight allowed while racing under ORR-EZ except as provided by rule III.D.2.
- 4. If specifically invoked by the Organizing Authority in the race documents, the Minimum crew weight allowed while racing shall be 75% of the RCW.

#### F. Sail Limitations

- 1. Sails larger than those of each type declared on the certificate are prohibited. There is no restriction on the number of sails that may be carried on board while racing.
- Except when changing sails, only one headsail, spinnaker, and staysail per mast may be flown.
- For Non-Spinnaker ratings, the ORR-EZ VPP assumes that boats shall not use Spinnakers or Large Roach Headsails.

- An asymmetric spinnaker rated to be flown on a movable pole may be tacked on centerline, bow or sprit, as long as the effective TPS dimension does not exceed the rated SPL dimension.
- 5. A headsail or asymmetric spinnaker may be flown in a "wing-and-wing" configuration without restriction.
- 6. Main and headsail furling shall only be declared if the furling sail is used while racing. The presence of the furling equipment, alone, does not qualify.

#### **G.** Auxiliary Propulsion

- 1. The arrangement and design of a boat's auxiliary propulsion shall be as declared on the certificate. If an outboard motor is specified, its weight (without fuel) shall be declared.
- 2. Auxiliary propulsion is not required by these rules.

#### H. The Certificate

- An approved, valid certificate shall be available online for inspection by the Organizing Authority.
- 2. By accepting the certificate for release, the applicant attests that the information on the certificate is true and accurate. If a certificate has not been accepted nor rejected after 30 days of being offered for customer review, or if the ratings are used for scoring a regatta, the certificate shall be assumed to be accepted for release.

#### IV. Changes and Adjustments to Handicaps

#### A. General

- 1. Changes in ratings shall be made whenever an adjustment is needed to provide equitable handicap racing.
- 2. Changes in ratings shall be effective upon the release date of the revised certificate and shall not be retroactive.
- If there are changes to the hull, rig, sails, or other factors upon which a yacht's rating is based, they must be reported immediately to the ORR-EZ Committee of the ORA. All changes to a certificate that affect the rating and are initiated by an Owner or competitor shall incur a fee.
- 4. If a boat races in a configuration that is inconsistent with the assumptions and declarations used to establish its rating, she is in breach of RRS 78. Compliance with Class Rules; Certificates. If deviations become apparent, other competitors are urged to protest the boat directly, and/or to bring such deviations to the attention of the ORR-EZ Committee.
- 5. Unless otherwise allowed by the Organizing Authority, once a regatta or series is completed, issues with a certificate shall not be protested or appealed with regards to that event.

#### B. Changes in Ownership

**ORR-EZ** certificates are not transferrable. If a boat is sold to a new Owner, all active certificates immediately become invalid and must be purchased by the new Owner. This does not apply to chartered or borrowed boats.

#### C. Changes during the Season

A boat shall be allowed to revise each of its rating certificates once per year (in addition to renewal) for an additional fee. Further revisions may be allowed at the discretion of **ORR-EZ**. This shall not prevent an owner or competitor from requesting a rating adjustment or appealing a rating decision as described below, nor prevent **ORR-EZ** from changing the rating in order to maintain equitable racing.

#### D. Changes with Renewal

A boat may revise the application data for each certificate upon annual renewal. Fees may vary depending upon the nature of the revisions.

#### E. Trial Certificates

Trial Certificates are only available for boats with current valid or preview certificates. Trial certificates are intended for crew, rig and sail changes only; Hull, Prop & Appendage (HPA) changes require a new certificate. The fee for a Trial certificate is non-refundable, but it may be credited towards advancing that Trial certificate to valid status.

#### F. Ratings Appeals

- Any person holding a current ORR-EZ certificate may appeal the rating of their boat, or of another boat holding a current ORR-EZ Certificate, whereupon the certificate holder will be notified of the pending appeal and by whom it was made.
- Appeals shall be made initially at the regional level and will be advanced to the national level as needed. Appellants must present documentation in support of their appeal. Appeals which escalate to involve the ORR-EZ VPP Technical Team shall incur a non-refundable fee which may be waived at the discretion of the Technical Team.

#### V. Fees

The fees associated with **ORR-EZ** ratings shall be as set forth in the **ORR-EZ Product Price List**. In special circumstances, discounts may be granted at the discretion of the **ORR-EZ** national and regional representatives. Prices are subject to change without notice.

#### VI. Definitions

See **ORR-EZ Cert Form Glossary**, including Course & Wind Range definitions: <a href="https://www.regattaman.com/certificates">https://www.regattaman.com/certificates</a> <a href="page.php">page.php</a>

See also the current **ORR Rules** for additional technical information.

## VII. Privacy

All data submitted, collected, created and published in association with an **ORR-EZ** rating certificate is the sole property of **ORR-EZ** and **ORA**. **ORR-EZ** and **ORA** do not share the personal or contact information of its clientele without prior notice and consent.

#### Appendix A – Certificate Example

See attached.