

# How to use ORR-Ez for your regatta

## Before the regatta:

- Language for the NOR/SIs
  - Under "Eligibility", you will want to add language for "...have a valid ORR-Ez certificate". Valid certificates for the current year are important because the VPP evolves as more changes in the sails and algorithm are incorporated and having current-year certificates ensure the boats are compared equally.
  - Add a new section for "Rating System" where you add details for how the ORR-Ez ratings will be applied in this regatta.
    - Single-number
    - Time or time or Time on Distance
    - PCS
    - Crew weight restrictions?
    - When wind ranges will be declared - Usually better to declare after a race because of changing conditions. Competitors will want before the race so they can determine timing deltas.
  - If you are allowing for a class to declare spin/non-spin for a race, specify when the competitor is required to declare their intentions and how to do it.
    - Must declare before the race?
    - At skippers meeting, passing behind RC boat, flying a streamer?
  - For SI's under Penalties and Protests
    - "As applicable for handicap scoring, the course and wind parameters determined by the RC shall not be grounds for redress under RRS 62.1(a)."
- Breaking into classes
  - The most common approach to breaking into classes is by splitting the fleet based on IR#s.
    - Use the ToD IR#
    - Focus on splitting your fleet into similar performing boats. Consider not sticking to straight class breaks. Separating between symmetrical and asymmetrical or by boats with big downwind speed vs. not can lead for more balanced racing
  - Challenge Cup splits:

Class	IR#
A	0-609.9

Class	IR#
B	610-649.9
C	650-689.9
D	690+

- Declaring spinnaker vs. non-spin
  - Because ORR-Ez provides for both spinnaker and non-spinnaker ratings in a single certificate, you have the opportunity to more easily mix fleets.
  - If you're allow to mix spin and non-spin, have a "default" for the class and they must declare if they're not sailing the default.
- Which flavor do you want to use? ToT, ToD, PCS, GYA Single Number
  - Most simple and flexible - Single Number
    - Using the ToD single number approach is the most simple for competitors.
    - Easiest to give "provisional" ratings
  - Average - ToT and ToD with wind speed/course configs
    - ToT will be more forgiving for changes in wind conditions during a race
    - ToD works great for short races with consistent wind speed
  - Advanced - PCS (polar/performance curve scoring)
    - Has the highest "resolution" or "fidelity"
    - Requires software that can handle PCS scoring with ORR-Ez
    - Must have an accurate course distance and configuration for proper results
    - The result of indexed wind will provide a "gut check" to what the observed wind speed was. If the indexed wind speed is dramatically different than observed, make sure your distance/times/course is correct.
- How to handle staggered starts
  - If you have a forecast that you trust, you can use the PHRF or "aligned" ToD ratings to build out a table of start times based on the wind range and course.
  - You can build 2 or 3 tables of start times to account for different wind forecasts. You would want to write in your SIs when you will announce which start time table will be used for the race.
  - You can pick between treating finish position as final position, are record a separate start and finish time for each boat and still let the ratings decide final position.
    - Sometimes a race committee just wants the boats to finish around each other, but wants a more accurate corrected time using ToT or PCS.

## During the regatta:

- Observing the wind
  - Use your eyes and common sense.
    - Very little action on the water surface - Very Light
    - Some action on the water surface with no real whitecaps - Light
    - Moderate action on the water with the occasional white caps - Light/Medium
    - Consistent white caps - Medium
    - Streaks across the water, big white caps, big surface action - Heavy
  - If you use a wind meter (anemometer), be sure to take readings as high as possible
    - Get on the bow of the RC boat
    - Use a long stick
    - Give your mark set a anemometer as well
  - Mix observed info with Wind Finder, weather stations, etc.
- Designing the course / Picking the right course configuration
  - Windward/Leeward courses are the easiest to rate. These courses assume tacking upwind and gybing downwind. If you have one-legged beats or runs, mostly reaching might be a better option as it doesn't have a lot of VMG built in.
  - Random leg courses assume equal work at all sailing angles which doesn't always apply
  - If there's a lot of reaching or spinnaker work, consider "Mostly downwind" or "Mostly reaching"
- Should I pick the wind speed before or after the start?
  - Unless you have special circumstances like staggered starts or a special course configuration, it's best to pick the wind speed after the race.
- Making sure RC knows what to record on finish sheets
  - All the standard data of finish times, start time, distance
  - Keep notes on observed wind speeds at the RC and mark set boats.
  - Keep notes on wind speeds from wind stations on the finish sheets. It can be hard to find that data after the fact on certain apps or sites.

## After the regatta:

- Scoring tools
  - Using an online scoring tool is going to be the easiest way to score and manage your event.
  - Online tools are going to keep rating data fresh and auto-update so you don't have to worry about entering data.
  - Regattaman.com

- Also where you can view all of the current certificates
- nextSailor.com
  - Free usage for GYA clubs
  - 5% fee for credit card registration
- What to look for on the result sheets
  - Make sure the result sheets have the rating type used, the course configuration, and the wind speed
  - If using PCS, make sure the details are there plus the indexed wind speed
- What to do with boats without certificates
  - Encourage everyone to get a certificate, even if it's just club racing. The data helps keep everything as up-to-date and fair as possible.
    - Renewals are only \$80/year
  - If the boat has a certificate in progress or other reason
    - Find a similar boat and use their certificate for that one regatta
    - "Sisterships" won't have all the correct details and can cause problems if used too often
    - Single race override if your scoring solution supports it