



# The RATING

## CONFUSION REGARDING THE CURRENT STATE OF HANDICAP RACING IS RAMPANT

in the United States. For racing sailors there are too many choices and not enough clarity about which rule they should be racing under, and which they'll be scored by. Change is afoot in the world of handicap racing, however, and in order to better understand the current slate of rules, **I recently sat with those in charge of seeing us through the fog.**

The group included yacht designer **Bill Lee**, who sits at the head of US Sailing's Offshore Big Boat Management Committee, **John Winder**, representing the Offshore Racing Association, **Sheila McCurdy**, past commodore of the Cruising Club of America, ORC chief measurer **Nicola Sironi**, and **Dan Nowlan**, of US Sailing's offshore office, which manages certificates and processing for all the rules currently in play in the United States: PHRF, ORR, HPR, IRC, and Portsmouth.

—DAVE REED

# TOGETHER PUZZLE

ROLEX SYDNEY HOBART RACE officials use IRC to score their entire fleet (left). Organizers of major U.S. offshore races, however, prefer the more transparent ORR and ORCi.

## Why is handicap racing in such flux?

**Bill Lee:** There are a huge number of moving parts right now. US Sailing formed the Offshore Big Boats Management Committee to replace the offshore committee. This committee has a representative from all the various rules. As its chairman, one of my mandates is to have them get along and respect each other's rules. We want to use the right rule for the right job and not make boats sail under a rule that they don't fit. US Sailing services all the different rules. It doesn't own or advocate any one rule over the other. They collect data, train measurers, issue certificates, and answer questions. So we have this new progressive deal where US Sailing, on a neutral basis, can serve all the rules in a user-friendly way.

## Who owns the various rules, and who is now sitting at the table?

**John Winder:** The Offshore Racing Association, which was started in 2004, owns and operates the Offshore Racing Rule. When we got started there were three major clubs running their own distance races using different rules: The Cruising Club of America with the Newport Bermuda Race, the Chicago YC with its Race to Mackinac, and the Transpacific YC with its Transpac Race. Each was using a variation of what became the ORR, which came from Americap, which came out of the International Measurement System. Among those clubs it was the mission to use the ORR rule in order to serve an event with widely disparate boats.

**Bill Lee:** Around this time, the U.S. fleet had been

using IMS. For various reasons it started to work less well for the U.S. races. Now there's the ORR, and then the High Performance Rule and ORCi, both of which are development rules. They each tell you what the rule is, and you can go run your calculations and try and fool the rule. For the U.S. fleet, with a lot of older boats, we didn't want to use a development rule for point-to-point races. We wanted to be able to rate a wide range of boats. A 30-year-old well-sailed, well-prepared boat

should have an equal chance.

That was one of the reasons to start ORR, which is an unpublished rule: You don't know what's in it, so it's harder to fool. The people that want to play hardball development are encouraged to go do it under a different rule. ORR is not intended as a grand-prix rule so it fits the wider U.S. fleet better.

**Sheila McCurdy:** One of the issues today is that the different groups that are associating with each other to make the rules available are in a state of flux. We're trying to cover the bases better than before. For a long time, if you wanted to get a boat measured you called US Sailing and they'd tell you to find a mea-

surer, and the measurer sent stuff to US Sailing. That puts the onus on the owner to know what they want and how they want it used. This doesn't help you get into the sport. Your designer has to show you how to do it. As rules have come and gone, yacht design has diversified dramatically. We now have a huge range of boats that race offshore.

In the past, our idea was that we'd keep trying to get everyone under one rule and make it work for all, but the reality is that the range is so big it won't happen. The high-performance guys want

## ➔ The Players

### ➤ Offshore Racing Association (ORA)

Owns, manages, and oversees the service and support of both the ORR and HPR ([www.offshorerace.org](http://www.offshorerace.org) and [www.hprsailing.org](http://www.hprsailing.org))

### ➤ Offshore Racing Congress (ORC)

Owns and operates ORCi and ORC Club ([www.orc.org](http://www.orc.org))

### ➤ Royal Ocean Racing Club (RORC)

Owns and manages IRC ([www.rorc.org](http://www.rorc.org)) in partnership with the French U.N.C.L.

### ➤ US Sailing

Independently services all rules ([home.ussailing.org](http://home.ussailing.org))

### ➤ Sailing Yacht Research Foundation (SYRF)

Privately funded entity that underwrites yacht performance research to support rule development ([www.saillyachtresearch.org](http://www.saillyachtresearch.org))

a development rule. They want a faster boat for a higher level of sailor. We're not going to put a governor on them and drag them back to the middle of the road, so it makes sense to give them a high-performance rule.

All-around boats, racer/cruisers, have been left behind with all the focus on the newest boats and the innovations. So it makes sense that there's a rule for people that just want to take what they have and compete under a fair, like-minded rule. So the idea of the Offshore Big Boat Management Committee is to leave each to its own. It's easy from an organizational view, but complicated for the guy trying to get in because there are too many options.

The ORA sees the vacuum that needs to be filled as one of a service position for the owners and event organizers who want to understand how this complex system works, what each rule would do for them, and where they fit in. It will make it easier for clubs to run races under different handicap rules and to help owners move from one rule to another. It's a service organization to hold the hand of people that want to use the rules.

### **Walk me through the experience of an owner entering his or her first offshore race, assuming they know nothing about the rules.**

**Sheila McCurdy:** Let's take, for example, a new point-to-point distance race. The organizer designs a good course, but now they have to convince a fleet of boats to enter the race. They realize that they want to sail under a rule other than PHRF, so they have to convince a bunch of owners to get measured. The organizers and the

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**—Sheila McCurdy**

competitors are not rating rule experts, so they're stuck there. They say it will be ORR, but then everyone's on their own to go figure it out.

In the end, a few owners with perfectly good raceboats say it's too onerous so they won't race. Instead, they'll sail along with the fleet to get safely to Maine. That's a sign we're not making it easy for people to go handicap racing. So ORA will take away that trouble and make it easy. Hope-



**“We want to use the right rule for the right job and not make boats sail under a rule that they don't fit.”**

**—Bill Lee**

fully that will provide, for boats that are entering local events, an easy step into offshore racing.

Once an organizer decides which rule it will use, they define how they're going to use it: plain or fancy, in terms of measurement data required. An interested owner would ask the organizer, “What are the steps to do this?” The ORA, knowing what race you have in mind, would walk you through how to find a measurer, make sure your boat is set up, explain the expenses you're looking at, and so on. Then they make sure US Sailing understands where the certificate needs to go and how it gets done.

**John Winder:** An organizer may not be versed enough in the range of rules, and they will offer prizes under IRC, PHRF, and ORR, not realizing that the net effect is a diluted fleet of like boats sailing in different divisions. That's not healthy. For example, the Halifax Race has a number of their entries pulled from the PHRF fleets in New England while there's an IRC contingent, too. The result is that this year they're choosing one or the other, and there's a dual-scoring component under ORR. It's a hand-holding responsibility at that point, and it's our job to educate and inform, and help them into the process. It's providing those services so someone can transition to a more sophisticated atmosphere.

## **➔ Handicap Acronyms 101**

- **Offshore Racing Rule (ORR)** A velocity prediction program-based rule designed to accommodate a wide range of boats. Ratings are calculated using measurements and the VPP, which calculates the speed potential at any combination of windspeed and course direction. In order to prevent development to the rule, the VPP's algorithms are private.
- **High Performance Rule (HPR)** A formula measurement rule that encourages unrestricted development of high-performance boats. The rule is published, and there are no secret components, but adjustments can be made to accommodate older boats.
- **IRC** A rule with private algorithms to discourage type forming. Administrators make annual adjustments to address anomalies and preserve the diversity of the fleet. There are two levels: Standard and Endorsed, with Endorsed requiring full measurement and Standard requiring only owner-supplied data.
- **Performance Racing Handicap Fleet (PHRF)** A rule that predicts the perceived speed potential of a yacht using design data and performance observations.
- **Offshore Racing Congress (ORC)** Owners of the VPP-based rule ORCi, popular in Europe. ORC is an evolution of IMS, so the algorithms are available and boats can be optimized to the rule. There are two levels: ORCi and ORC Club; the former requiring full measurement and the latter using design and sistership data.
- **Universal Measurement System (UMS)** A system currently being developed cooperatively by all international rating offices whereby all boats are measured and recorded using the same data points (and submitted to the Universal Measurement Form). Measurement data is stored on ORC-owned servers, allowing certificates to be issued for all participating rules.

## “PHRF has had to deal with race programs far more sophisticated than the rule intended.”

—Dan Nowlan

**Bill Lee:** In the past, a rule would fade because the type form that fit the rule became obsolete. The thing of late is the “my rule is better than your rule” problem, which has unnecessarily driven people away.

**Sheila McCurdy:** This also causes a lack of trust among the owners because they don’t know what to believe.

**Bill Lee:** Which is a great bonus for PHRF, because PHRF becomes the default position in the United States when you can’t agree on anything, or people stay home because PHRF is too informal.

**Dan Nowlan:** It also causes huge problems for PHRF because it has to deal with race programs far more sophisticated than the rule intended.

**Sheila McCurdy:** And more sophisticated programs start poaching on a less sophisticated rule. In a vacuum, other races were using PHRF with more sophisticated boats coming in and taking advantage, which chases others out. This ORA effort, from many different directions, is trying to encourage teams to seek their rule. We’ve got some repairing to do. We need to educate people and entice them back because we forced them away.

### Does the ORA and ORR have an identity problem in the States?

**Sheila McCurdy:** The ORA is currently restructuring itself. Originally it was more on the technical side, but the real need is on the service side. We already have plenty of technical people, and the Sailing Yacht Research Foundation is providing research to support ORR. Then HPR came along, so now we have two very different rules. The ORA umbrella has become larger and wider as to how it can serve the sailing public.

**Bill Lee:** There’s an important distinction here: ORR is primarily for North American interests. We have no program to export it. With HPR we see international potential. If we had to manage

it out of the United States, we’d have to develop complex and expensive software system and recruit rating offices around the world. ORC already has a network, and with the Universal Measurement System we tap into 33 rating offices sitting on a lot of good data. Therefore, the two rules under ORA get serviced in vastly different ways.

### Explain the UMS and its role.

**Bill Lee:** The idea behind the UMS is that the measurer gets all the necessary measurements of a boat and puts them into what’s called a Universal Measurement Form. With a single and repeatable measurement system, an owner can get a boat’s rating under any rule. Instead of saying, “our rule is best,” we can say we have the best data, and we can service any rule. This is a complete reversal of the mentality we’ve had to date.

The idea is to have a UMS website that’s like a vending machine. You’ve got four buttons, one for each of the rules. Each button takes you to a specific rule’s site, where you input your credit card, answer some questions, and it gives you your certificate. This is very different than just creating another rule. It’s an approach to dealing with the existing rules. It’s about the data and unifying the rules. It also allows you to take your boat to a place where a different rule is dominant without have to get re-measured.

**John Winder:** Part of why the UMS is being created is that it’s pulling from past history of a database that has many boats measured under IMS and other rules, such that there’s a lot more data available so that a boat doesn’t need a lot more complex measurements.

**Dan Nowlan:** In fact, we’re still pulling data from the IOR database.

**Nicola Sironi:** The boats never die. The measurement data is the treasure.



**Dan Nowlan:** The ORC has a really great database. They deal with 33 nations, so they have a lot of data. We approached them about sharing it and said, “If this happens, what if you manage it?” They have all the tools already.

### What’s the reasoning behind the Big Boat Series requiring all boats to be measured using the UMS?

**Bill Lee:** The Big Boat Series has tried every rule known to man. The last few years it’s been IRC, and some of the boats that want to come in don’t fit the IRC type form, which results in a small regatta. St. Francis YC finds itself in a dance with who’s going to come and where to put them to make meaningful divisions. So this year they will require every boat to be measured with the UMS as a condition of entry. Once they have good data they can put the boats that fit well in IRC in one group. Boats that fit HPR go to HPR, and then the catchall group may

likely fit well together under ORR, which can absorb a wider range of types. It’s an interesting approach to a regatta. As the organizer, if you’re going to have multiple rules in a regatta, it’s impor-

tant to take the lead in who ends up in each division, rather than people choosing which rule fits them best.

**John Winder:** That’s why Newport Bermuda Race has gone a step further and defined limits and established the parameters of what types of boat can sail in certain divisions. For example, putting boats that are likely to plane in their own division rather than with the racer/cruisers that would be in the amateur division. To do this, organizers need to have a backbone.

### Where does IRC fit into this?

**Dan Nowlan:** IRC, which has its origins in the Channel Handicap System, where it originally served mom and pop programs, through its popularity has now become a default development rule, and has had to deal with a lot of sophisticated sailing programs. The original lower-level programs still want IRC, but feel they’re being left behind as IRC is forced to focus on the high-performance boats. IRC is looking very hard at how to solve that. They do not want to leave the other group behind. They’re trying to figure out how to do it and keep this great service for those who are trying to use it as a development rule.

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—John Winder