



Making the Switch to IRC: Everything You Need to Know!

IRC has become the premier rating system for sailors of boats of all size, type and vintage who are committed to high-quality handicap racing. IRC treats a diverse fleet fairly and equitably and as participation continues to grow, it's become clear that it's here to stay. If you've been thinking about taking your game to the next level or thinking about getting an IRC certificate to join in on the fun and excitement of close competition, keep reading to find out everything you'll need to know about making the switch....

What is the IRC rule?

The IRC rule is a yacht-rating rule aimed primarily at cruiser/racer type boats typically raced by club sailors. In 2000, the IRC rule was developed from and replaced the Channel Handicap System rating rule. IRC is a rating rule meaning that each boat's time corrector is calculated from her rated data in an objective manner using exactly the same routine as for all other boats. It is not a performance handicap system.

What is the difference between a rating and handicap rule?

Racing boats need to obtain either a *handicap* or a *rating* to race fairly with boats of different designs.

A handicap system, usually locally administered such as PHRF, allocates a time allowance to a boat to reflect its performance on the water. This allowance can be reviewed based on actual performance and race results. A handicap rule is basically trying to answer the question, 'How fast did this boat go last week?' Most handicap schemes require performance and/or subjective assessment of handicaps.

A rating, on the other hand, is a time corrector based on the measurements of the boat, rig and sails and takes no account of crew ability or race results and is therefore, more objective. A rating calculated for a design in one location will be equally applicable everywhere else. So boats can move from place to place and regatta to regatta without re-rating at the whim of the local handicappers.

Who administers IRC?

The IRC rule is administered through the Royal Ocean Racing Club (RORC) Rating Office based in Lymington, England and the Union National Pour La Course Au Large (UNCL) in Paris, France and issue rating certificates world-wide. Canadian and US boats are rated through the RORC office, which is staffed by seven full time staff. The RORC Rating Office obtains measurements from boats applying for a rating and calculates a time corrector based on that data.

Where is the IRC rule currently used?

In 2003, the ISAF accepted IRC as an international rating system and the rule is now used world-wide for races and regattas ranging from local club series to national events such as Block Island Race Week, Cowes Week, the Sydney-Hobart and Cork Week in Ireland. The IRC rule is used by fleets in over 30 countries including the UK, Canada, USA, Ireland, Australia, Portugal, Hong Kong, Singapore, France, Thailand, Italy, Spain, Malta and South Africa. As of August 2010, nearly 7,500 boats were rated worldwide.

What are the benefits of racing under the IRC rule?

- ❁ **User-friendly** - IRC is simple for owners, sailors and administrators. It is designed to allow owners to apply for and maintain their certificates with a minimum of fuss and inconvenience.
- ❁ **Open to all type, size and age of boats** - IRC is a permissive rule. It is open to all type, size and age of boats. The rule permits features such as asymmetric spinnakers, bowsprits, water ballast, canting keels, code zero headsails, etc., and tries to deal with these features equitably alongside more conventional boats.
- ❁ **Straightforward results calculation** – IRC is a time-on-time system. Simply multiply each boat's elapsed time by her time corrector to get corrected time. The lowest corrected time wins.
- ❁ **Minimizes "type forming"** - The mathematics of the IRC rule are held confidentially by the rating office meaning that designers cannot design to the rule as with other rating rules and owners cannot optimize their boats to the same degree as under other rules. This arrangement also minimizes type forming – the rule can cater to a much wider range of boats. Very different designs can and do win races and the racing life of boats is dramatically extended, maintaining the value of the boat.
- ❁ **Easy to gauge position in fleet** - Take the ratings of two boats and deduct one from the other. Each 0.001 difference equals approximately 3.6 seconds per hour. If Boat A rates 1.010 and Boat B rates 0.995, the difference is 0.015. Therefore, $15 \times 3.6 = 54$, so Boat A gives Boat B about 54 seconds per hour.
- ❁ **Non-political** – IRC is based on the measurements of a boat, rig and sails and takes no account of crew ability or race results and is therefore, more objective.

Why are we using this system on Lake Ontario?

1. In 2004, we moved from IMS to IRC because we weren't seeing any growth in the IMS fleet due to the complexity of the measurement process; the high cost of measurement; lack of understanding of the rule and scoring process; and because the rule was seen as type forming and therefore could be easily exploited.
2. To achieve and maintain good participation, Lake Ontario needs a two-tiered system to separate the casual racer from those who would like to sail in a more competitive fleet.
3. IRC is the most appropriate rating system available for our fleet as it is scientifically based; non-type forming; easily measured and scored; objective; and is an easy to understand, time-on-time rating system. IRC accommodates more varied styles of boats typical to Lake Ontario sailing – old and new.
4. The fundamental policy of IRC is to protect the existing fleet and encourage design innovation consistent with stability-rounded performance, seaworthiness and safety.
5. IRC discourages unnecessary expense at all levels.

I have a PHRF certificate – why should I get an IRC certificate?

IRC has evolved into the rule of choice for virtually all interclub racing on Lake Ontario and there are now approximately 70 active IRC boats on Lake Ontario with over 50 of those in Toronto and its surrounding area. PHRF is an excellent introductory system to get into keelboat competition and is the system of choice for virtually all club mid-week competition. It is very simple and inexpensive to get a certificate but has limitations when competition is taken to the next level where owners demand a greater accuracy of rating individual boats. IRC eliminates the subjective elements found in PHRF and rates boats in an objective way that eliminates all regional influences, allowing the competition to be more about race tactics, strategy and crew performance.

I sail a one-design boat – why should I get an IRC certificate?

We all agree that sailing one-design is probably the purest form of our sport but even the best one-design keelboats often do not have a large enough local and regional presence to create good fleets for regular one-design competition. Accordingly, all one-designs go through cycles where active owners come and go, leaving many fleets with limited one-design racing opportunities.

This is where IRC comes in. IRC offers one-designs a competitive place to play when a class event is not available. IRC is attracting many individual boats from active classes as it offers a different challenge – racing against a diverse fleet of well prepared and sailed boats, keeping one-design skippers and crew in tune for their next one-design event. The measurement process for most one-designs is very easy and straight forward, offering the opportunity to take standard hull weights and sail dimensions. Floating measurements are almost always mandatory under IRC as this exposes the differences between individual boats and therefore, rates boats more accurately than even many one-design classes are capable of achieving.

How much does it cost?

IRC discourages unnecessary expense at all levels. A new application costs \$19.80 per metre LOA. Therefore, a certificate for a 30 foot boat would cost approximately \$181.00 CAD.

Once I have my IRC certificate, how long is it good for?

Because IRC is a "live" rule – it is amended on an annual basis to fine-tune and improve it to reflect changes in design, sailing practices etc. Certificates are valid for one calendar year and therefore, there is no guarantee that a yacht's time corrector will remain the same from one year to the next. Certificate holders are automatically sent a revalidation form each year and if the boat is unchanged, the boat owner must confirm that no changes have been made, sign the revalidation form and return the form with a credit card number for the new certificate. Revalidation costs \$17.10 CAD per metre LOA.

How do I get an IRC certificate?

Contact any of the IRC measurers listed at the end of this document for more information on how to get an IRC certificate.

Do I have to weigh my boat?

Weighing your boat is not required, however, IRC uses a low weight which is a slight penalty if you use the standard weight. Weighing the boat will normally result in a better rating by 0.003-0.004 (0.001 is the equivalent of 3.6 seconds per hour).

Do I have to take everything off the boat?

The only items left on the boat during measurement are cushions that would remain on board during racing. The fuel needs to be pumped out, but the measurer can take care of this.

Do I have to have all of my sails measured?

Only the main, spinnakers and the largest genoa need to be measured. We recommend that you get this done by your sail maker.

Where can I get more information?

- ✓ The RORC Rating Office web site (www.rorcrating.com) includes full details, rules, application forms, explanations, notes to help fill in the form, definitions, fees and articles about IRC.
- ✓ Visit www.ircrating.org, www.us-irc.org, www.lorc.org
- ✓ Contact any of these IRC measurers:
 - John Crawley – jccrawley@gmail.com (Toronto, Chief Measurer)
 - Peter Wallace – oldb777ca@sympatico.ca (Mississauga)
 - Tony Shepherd – tmshep@xcelco.on.ca (Sarnia)