



IRC Rating Reviews

1. Background

Before directly addressing IRC rating reviews, it is important to understand what IRC is and what IRC is trying to achieve.

Firstly, IRC is a rating rule. Each boat's TCC is calculated from her measured and rated data. IRC is not a handicap system such as PY or PHRF. Simplistically, a handicap system is trying to answer the question 'How fast did this boat go last week?'. Handicap systems are therefore subjective. IRC is objective.

Secondly, IRC makes the presumption that each boat is fundamentally of sound design. That does not mean IRC does not take note of cruising and other compromises to design. It does. Fitout for instance, materials, rig configuration, etc are all included in the calculation of TCC. But if a boat's design is such that it just plain does not perform as the data suggests, then no account is taken of that. So, keel and rudder design, hull form, ballasting, rig proportions, etc are all assumed to be reasonable (within the context of the particular boat) and sensible. It would be philosophically very unwise to adopt any other philosophy which could lead to the encouragement of poor design.

Thirdly, IRC is aimed at production cruiser/racers and racer/cruisers. By their very nature, such designs tend not to be extreme. To support this, IRC tends to treat extremes in design slightly severely. To do otherwise would be to encourage extreme designs to the cost of the more middle of the road boats. 'Extreme' is of course a relative term and also will change with time. What was extreme 10 years ago might now be the norm. Over the last 30 years for instance displacement has reduced significantly with advances in primarily materials and structures allowing the construction of much lighter boats. The norm must therefore be continually re-addressed.

Any boat with a valid IRC certificate is entitled to ask the IRC Rating Authority to review her rating. Additionally, a boat may ask for another boat's certificate to be reviewed. Or the Rating Authority may conduct a review. This is all incorporated in to IRC Rule 19:

19.0 RATING REVIEW

19.1 *Review of a boat's rating may be requested at any time by the owner who should submit a review request through their Rule Authority to the Rating Authority. A fee may apply.*

19.2 *Anyone who has a valid interest in a boat's certificate may also request rating review from the Rating Authority, by submitting a review request through their Rule Authority to the Rating Authority. A fee may apply. The owner of the boat subject to review will be requested to file a reply as soon as possible.*

19.3 *The Rating Authority may also review the rating at any time.*

2. Rating Review

What then is a 'rating review' in the context of all of this?

As noted above, there are two types of review. A review under IRC Rule 19.1 is a '1st party review'. What this is NOT is a help line for boats unwilling to help themselves! It is a process whereby an owner may ask that the contents of his own boat's file are checked and the calculation of rating confirmed. A review under Rule 19.2 of another boat is a '3rd party review'. The two follow the same general process.

On receipt of a review request, the Rating Authority will:



2.1 Inspect the boat's datafile for obvious errors

In doing this, checks will be made for:

- a) Possible errors made by the owner by looking for data diverging from typical norms (very large/small sail widths for instance). Plainly, small errors (which if present in sufficient number can become significant) are not going to be found.
- b) Possible errors made by the Rating Office. The use in recent years of automated data input for new boats has dramatically reduced the possibility of this latter. It does however occasionally still arise, particularly with obscure boat configurations confusing the data import routines. Typographic errors are also not unknown, although these should be detectable by owners by inspection of their certificates. Hull Factor assessment is also now automated further reducing the possibility of error, provided that the owner has supplied complete and correct information.
- c) In the case of a 3rd party review, inspect the data and data sources for accuracy. The Rating Authority may require re-measurement of some or all of the data.

2.2 Check for completeness of information.

There are numerous occasions when an owner does not for instance supply full sail data. The basics are supplied, but eg mainsail widths are not and as a result default values are used which may be significantly in excess of what the boat actually has. While this issue is clearly the responsibility of an owner, attention is nevertheless drawn to deficiencies whenever possible.

With new designs, either one-off or production, it is now standard practice to ask for drawings/pictures of both the exterior and the interior of the boat. Owners often fail to supply these. It is also common for applications to be left until late and to be required before information is supplied. On such occasions, a cautionary view is taken resulting in a higher TCC than might otherwise be the case.

2.3 Review Hull Factor assessment

Hull Factor (HF) is assessed using a set of objective rules agreed by the Rating Authority and generically applied to all IRC rated boats. The actual HF assessment process is incorporated into IRC software. See [link to IRC Thermometer](#)

Hull Factor is probably the most contentious issue within IRC. Under IRC's original guise as CHS, HF was wholly subjective. During the mid 1990s, it became partially objective. With the transition from CHS to IRC in 1999, this objectivity increased. Today, HF assessment is in 99% of cases wholly objective. And, as noted above, the assessment process is now automated.

The objective assessment methodology is however continually reviewed on an annual basis to reflect developments in sailing and in the design and construction of boats. Recent examples of this include the more explicit keel definitions incorporated for 2008, and the inclusion of 'light' and 'racing' materials used in a boats fitout.

In conducting a rating review, the Rating Authority will as appropriate confirm that the assessment is correct, that the information used is complete, and that the assessment methodology used has not subsequently been updated.

It should also be clearly noted that while HF may be contentious, it is only one of the 'modifiers' on TCC. Within the sensible range of HF for any boat, the effect on TCC is rarely more than +/- 0.005. Which will not often affect the outcome of races to any significant degree.



2.4 Comment

Noting that IRC is a rating rule, it is thus addressing the boat and not her crew. It is however not uncommon for boats to be configured in ways that compromise the performance to such an extent that no rating rule in the world is going to save them. Heavy, undercanvassed designs with the sail area further reduced, fitted with fixed props and roller furling headsails. Or boats carrying enormous spinnakers that they cannot use effectively and which contribute nothing to boat speed but which increase TCC.

In cases such as these, the Rating Authority must be wary of acting as consultants compromising the position as guardians of IRC. Whenever possible however, owners attention will be drawn to any such issues.

2.5 IRC development

The Rating Authority runs and maintains a continually rolling IRC research agenda. It is common for issues arising out of a rating review to be added to this agenda. That does not always mean that there will be any change. But it does mean that issues arising out of the review of an individual boat's rating are then addressed in a generic context as opposed to just against that single design. This may mean that while the outcome of the review is immediately no change, that at some point in the future, generic changes to IRC, applied to all boats, will produce an effect for the boat under review.

3. The Review Committee

The IRC Review Committee is jointly chaired by the members of the IRC Technical Committee. There are 4 additional members, two from each of the IRC rating offices. Any two of the six members may form an IRC Rating Review Panel and act independently of the other members of the committee, except that for reviews of designs rated by both rating offices, there shall be at least one member from each rating office.

4. Review process for owners

Owners wishing to request a review of the rating of their own or another boat should contact their local IRC Rule Authority requesting an IRC rating review application form. The completed form should be returned to their local IRC Rule Authority who will forward it on to the IRC Rating Authority.

As permitted by IRC Rules 19.1 and 19.2, the IRC Rating Authority may charge a fee. This fee will normally be waived for the first review application by an owner. Subsequent applications will normally be charged a fee which will not be greater than £100 without prior notice.

The IRC Rating Authority will use its best endeavours to produce a response within 15 working days of receipt of the request.