FOR HANDS-ON RACING

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GREAT LEVELLER

In an ideal world the handicap system would iron out differences in performance between boats taking part in a race. The level of crew work across the fleet would be of a sufficiently high and consistent standard to ensure close racing. And everyone's corrected time would be the same. While the results table would be easy to read, prizegivings would be a nightmare.

Of course, handicap racing is anything but ideal. Bandit ratings, poor course setting and bad luck will usually

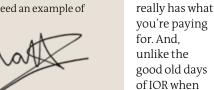
Aside from the paperwork, proper well-planned training can work wonders

be further up the list of excuses than lack of ability, planning or preparation. But as the IRC administrators are quick to point out, many of us are carrying unnecessary points on our certificates.

Aside from the paperwork, proper well planned training can also work wonders as this year's winners of the Somerset Memorial trophy have proved.

Our boat of the month, *Puma Logic*, may be ten years old with a relatively inexperienced crew, but their campaign proves it's not the paperwork or the tools that are generally to blame.

Their story is indeed an example of an ideal world.



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IMPROVE YOUR

Understanding your

According to the Rating Office,

more than 50 per cent of IRC

points. In part 2 of our special

racers carry unnecessary

feature Matthew Sheahan

explains the detail on your

ake a look at your IRC rating. Is that

the number of boats carrying points for

performance they simply don't have, it's

up for a few months, now is the time to

sharpening up your performance for the

a reasonable one to ask. With your boat laid

take stock and make the first steps towards

Understanding what the data on your

IRC certificate means is essential in order

blisters and bustles could hide among the

complex data of a handicap printout that

understand, today's IRC certificates are

easy to read and even easier to cross-check

Certainly there are some factors that

have little practical relevance to the boat's

A trip to the RORC Rating Office with a

performance, but which are they and

handful of certificates provided some insights into maximising your rating.

which are the factors that matter?

only a handful of boffins could

against your boat.

the best you can do? This might

seem a harsh question, but given

IRC certificate

coming season.

to make sure

bumps,

that your boat

certificate

This is the number that really counts. If the audited and verified where necessary by the charged the amended certificate fee that you will be if you change data later in the season.

But whether you pay extra or not, unless the data has come from either a bona fide measurer or an approved sailmaker, new data will cancel the Endorsed element of your certificate until such time as it becomes re-Endorsed by the Rating Office.

Overhangs

Not to be confused with the Overhang Factor,

DLR - Displacement:length ratio

How heavy is your boat for her length? to be better in a breeze and upwind.

Typical range: 60-350 60 – Mini-Maxi type

350 - displacement cruiser or cruiser-racer

There's not much you can do to change this number in order to tweak your rating, but the DLR does provide a good initial guide as to what kind of a boat you're dealing with. Particularly useful for regatta organisers to group similar types of boat rather than just their size, but also handy for skippers to get a handle on their competition.

Batteries and cushions

Are you rated without cushions and if so. do they stay ashore? There's no point in carrying unnecessary weight if your boat isn't rated for them.

TCC - Time Correction Coefficient-

figure is 'Endorsed' (as here) the data has been Rating Office. If you submit new/revised data with your annual IRC application you won't be

these are important and worth checking, especially if the Rating Office has had to use standard data. But if you do measure them, make sure that the boat is empty and in its correct trim.

Smaller figures tend to be better downwind flyers and plane readily. Bigger figures tend

150-200 – modern production cruiser

Multiple headsails

Boat:

TCC:

3ail Number:

ENDORSED

Low vcg iron+lead single keel

Inboard engine : Weight 210kg

2 blade folding/feathering propeller

No wing keel

PUMA LOGIC

2009

GBR7383R

10078

1.071

Are you are racing with a furling headsail alone? If so, the wording on your certificate should reflect this and you could be eligible for a furling headsail credit.

IRCRATING: Part 2 **Stability**

COPY Stability SSS Base Value:

General Details Design: REFLEX 38 2.30 Series Date: 1999 Туре: Bermudian Sloop Hull Factor: Age Date: 1999 9.0 Amendment : weight, SPA Rig Factor: Crew No.: 9 Seahorse weighed +6kg new boom + 50kg strengthening; Overhangs measured 1.01 Overhang Factor: 1.04

Overhangs Rig & Mainsail Headsail 11.58 BO: LWP: 0.19 Spinnaker 10.52 14.46 LLmax: 14.22 Hull Beam 0.00 0.00 3.90 5.25 SPA: Boat Weight: LL: LP: 108.16 0.00 14.22 6108 SO: 4.08 0.00 STL: IRC Disr 0.87 5.95 2.98 LLY: 14.87 0.00 HHW: 0.21 LPY: MUW: SLE*: 1.15 0.00 14.14 HTW: 1.49 MTW: SLU* 1.99 14.14 HHB: MHW: 3.41 8.76 HSA: SHW* 9.33 Detail

No Spinnaker TCC: Multiple headsails permitted ber of spinnakers carried: Spinnaker/whisker pole with or without Bowsprit Spreader (sets) Runners (sets) Aluminium Mast

Weight includes batteries/cushions Jumper (sets) ISAF OSR compliant guardrails fitted Checkstavs (sets) Manual power only for running rigging Wire standing rigging HSA=0.125*LL*(2*LP + 3*HHW + 2*HHV No variable/moveable ballast carried SPA=((SLU+SLE)/2)*((SF+(4*SHW))/5)*0.83 Forestay/Mast Foot not adjustable

Certificate issued by the IRC Bating Authority and VALID from 31 Dec 2009 unless superseded or invalidated by IRC Rules and Regulations I accept the dimensions shown on this certificate and agree to report all subsequent changes and any errors

Wire/rod/composite rigging

AVS typical range:

small boats)

150 - very good

104 - poor (especially on

handicap and is included

organisers establish the ISO

category of the entries and

However, having clear

displayed gets the thumbs up

from us – especially AVS, the

angle of vanishing stability,

measured in degrees, which

details the angle at which the

boat wants to invert rather

The number cannot be

treated in isolation as the size

of the boat is a factor, but in

general, the bigger the better.

than right itself.

primarily to help event

their stability data.

stability information

This data has no effect on your

Check that the rigging you are rated for is what you have. At present there are relatively few boats with composite (eg PBO or carbon) standing rigging and while the Rating Office doesn't wish to discourage such materials, it is also aware that at present the technology is expensive and doesn't want to force owners to go down this route to be competitive.

One to watch in the future as the rigging becomes more commonplace and hopefully more affordable.

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Understanding your certificate

Hull Factor - the final fudge factor?

Typical range: higher number, more extreme racer 3.50 - Bristol Channel Pilot Cutter 16.0 - Full Pelt, 36ft LOA Open sportsboat

Possibly the most hotly debated IRC factor, the Hull Factor is seen by many as a final arbitrary tweak to shift the calculated handicap to where the Rating Office believes it would most accurately represent the performance of the boat. While this may have been the case in the early days of Channel Handicap, Rating Office technical director Mike Urwin is quick to correct the misconception.

"Hull factor is addressing the otherwise unrated elements of a boat. It is making a judgement of her likely 'efficiency' on a scale between pure cruiser and pure racer," he says. "We do not have the hull lines, but we do know the general hull form, whether it is fair form, IOR-inspired, clinker, etc. We also know quite a lot about the keel and whether it is just a fin or some form of low centre of gravity keel. We know how many rudders the boat has and whether these are transom-mounted, hung on a skeg or are a spade configuration. We also know whether or not the boat has a novel appendage configuration, a canting keel or twin lifting daggerboards perhaps.

"We also know what the boat is built from, whether it is a completely stripped-out dayboat, or a grand-prix inshore racer, or a fully fitted world girdling cruiser with running hot and cold everything. We know what materials have been used in the construction of the interior.

"Taking this and other data like it, we can then assign a numerical value to each element using objective rules and methodologies developed over the years. Combining these then gives us the Hull Factor (HF).

"Within the sensible range for any boat, the effect of HF on TCC is small, generally less than 0.005."

For the complete IRC Yearbook 2010 online go to www.yachting world.com/ircyearbook2010

Rig Factor

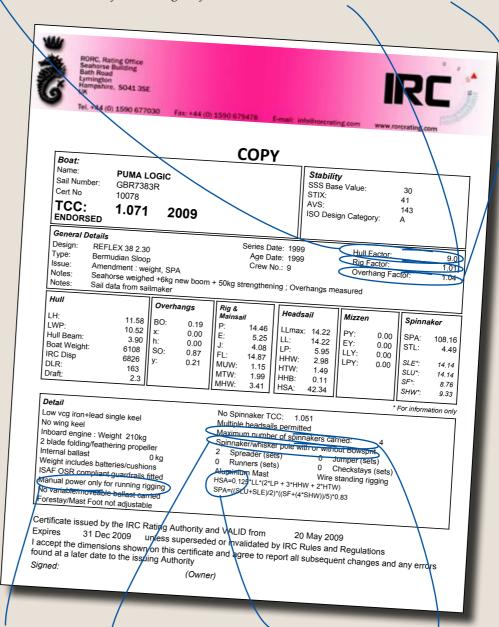
Typical range: 1.00-1.03. Higher number, more extreme 'tweaky' rig 0.90 - 'Cat' rig 1.08 - Open 60 style This looks at the ability to tweak a rig to change gear. The number also takes into account light rigs, although carbon rigs do not count here.

Not a lot of ways to adjust your handicap although, if you have

an older rig with aft-swept spreaders and checkstays, ask whether you really need the checks any more. Worth taking advice from the spar maker on this one.

Overhang Factor

Ignore, used to be significant. but now of little importance to the majority of boats.



Manual or stored power

New for 2010, there are now three categories: manual power only, stored power for backstay only and stored power for running rigging.

Spinnaker pole and/ or bowsprit

IRC sees four distinct categories, listed here in order of ascending rating: 1 – No pole at all **2** – Centreline bowsprit

3 – Articulated bowsprit 4-Conventional spinnaker pole and bowsprit, provided latter is no longer than the spinnaker pole

HSA and **SPA**

How the headsail and spinnaker areas are calculated. Knowing how the area is calculated can help owners and sailmakers assess how to change the proportions of a sail without changing the area.

Max spinnakers

Are you paying a penalty for carrying too many kites? Three is the default, a fourth or more will incur a penalty, although this penalty is smaller for bigger boats.