



Cruiser Handicap Update 2010

The usual adjustment exercise has been carried out based on the 2009 season's results. Only boats that completed at least 3 race days (including the Ladies race) were considered for handicap adjustment. Performance was very evenly spread over the majority of these 18 boats, so only minor adjustments have been made. Having now run this process for a while, it is felt that some limit should be put on adjustments based on performance in order to avoid unduly penalising folk who sail their boats very skilfully. In general, we will apply a limit on the total club adjustment to be within the range -2.5% to + 2.5% of base handicap number.

We are also this year updating the handicap formula used for fin-keeled boats, and also refining adjustments for features such as folding propeller etc. The RYA now recommends for the Portsmouth system adjustments made on a percentage basis rather than absolute amounts. So, for example, a folding propeller attracts an adjustment of -1% rather than -10 points. In practice, this is a very minor variation, but use of percentages has a more sound rationale. We have already been using a percentage adjustment (+4%) for completion of a Back Passage race with no downwind sail used. The formula refinement is also minor in practice, but is based on a larger data set than used for our previous formula, so in theory should be an improvement.

We are applying these changes as follows:

- (i) boats without a club race history (no completed races in the last 4 years) will be assigned a revised handicap number,
- (ii) boats with a race history will keep their 2009 handicap number and it will be represented as the sum of the number given by the revised formula + revised adjustments together with a revised club adjustment (where appropriate).

Formulae 2010

Fin/IB2 :
$$FN = 1556 - 89d^2 - 525 \frac{B}{LWL} - 42.5\sqrt{LWL} + 1460 \frac{SA}{D}$$

2K bilge/IB2 :
$$FN = 2211 - 1389d + 431d^2 - 137 \frac{B}{LWL} - 54.9\sqrt{LWL} + 455 \frac{SA}{D^{2/3}}$$

[*d* = draft, *LWL* = waterline length, *B* = beam, *SA* = sail area, *D* = displacement (metric).

NB - these formulae cannot be 'unpicked', in the sense of viewing each term individually - due to the fact that the terms are not independent of each other.]

Adjustments 2010

Engine related	3 blade fixed propeller	+2%
	folding propeller	-1%
	outboard (able to be lifted clear of the water)	-2%
Further keel factors	3 keel bilge	+1%
	drop keel	-1.5%
	long keel	-3%
	'non-flat' keel*	-0.5%
Rig features	twin mast ketch	+4%
	high-tech sails	-1%
	in-mast reefing	+2%

*We have introduced a 'non-flat' keel adjustment to try to account for the performance edge of modern keels that have a bulb or similar weighted base. The adjustment is experimental at this stage.

LW, March 2010