



# Establishing Sensible Starting Handicap for a Regatta or New Season

## Introduction

Often, handicap prizes are often part of the Prize List at Regattas. In such cases, starting handicaps that make sense are important. But, how are they established?

TopYacht has a utility for ending such dilemmas. It is acknowledged that there may be different methodologies, this technique has not been challenged yet, and the outcomes accepted.

## Method

1. When creating a series, create two groups one to be scored on elapsed time and one to be scored on handicap corrected time.

The screenshot shows the 'SeriesSUWizardForm' software interface. The title bar reads 'SeriesSUWizardForm'. The main window has a yellow header with the text 'PAGE 3 The Series MUST have at least one Group selected!'. Below this is a table titled 'GROUPS IN SERIES' with columns 'SGID', 'GROUP NAME', 'TEMP ID', and 'TEMPLATE'. The table contains two rows: Row 1: SGID 1, GROUP NAME 'Championship', TEMP ID 3, TEMPLATE 'Class ET'; Row 2: SGID 2, GROUP NAME 'Handicap', TEMP ID 54, TEMPLATE 'YV'. Below the table are buttons for '+ Add New Group' and '- Remove Group'. To the right of the table is a section titled 'PROVIDE RESULTS FOR...' with three radio buttons: 'All Competitors in the group [Fleet Results]', 'Individual Classes / One Design [Class Results]' (which is selected), and 'Mixed Class / Design groupings [Division Results]'. Below this are several checkboxes: 'Manually Allocate Competitors to this Group [OR all competitors are added to this Group]', 'Use Class Yardsticks/PNs/CBHs/Marks', 'Use Multihull Correction Factor (Dinghy/Cat races)', 'Use individual handicaps for each competitor' (checked), and 'Include Casual Entrants Times in HC Calcs' (checked). Below the checkboxes are three dropdown menus: 'HANDICAP SYSTEM' set to 'PHC1', 'POINT SCORING SYSTEM' set to 'Low Point System', and 'PENALTY PLACES SYSTEM' set to 'ISAF RRS A4.2 SERIES SCORES'. At the bottom right is a box for 'Rostered Sailor's "DUTY" Score' with 'Average of' followed by a text input field and 'BEST Scores'.

2. As can be seen above the selected handicap system is PHC1. Make sure that PHC1 definition is set to a sensible set of handicap values as shown below.

See [Appendix 1](#) for details.

- Assuming you have imported the competitors from a CSV list, or have manually entered the competitors into the master list, add all the competitors into the series, using step three from TopYacht's main menu. Enter the competitors into the handicap group by giving each an initial handicap of 1.0.

Sail No	Boat Name	IN	ADD	First Name	Last Name	Class	HANDICAP
4109	Snake Bite	☺		Bart	Newman	CadetInternational	1.000
4118	Skeeta	☺		Callum	Wilkinson	CadetInternational	1.000
4659	Red Rocket	☺		Jock	Sinclair	CadetInternational	1.000
4664	Blue Max	☺		Harrison	Gibb	CadetInternational	1.000
4690	Sailmaker	☺		Clare	Blakebrough	CadetInternational	1.000
4884	Jerboa	☺		Glen	Wall	CadetInternational	1.000
4891	Cat Burglar	☺		Zacharie	Elsworthy	CadetInternational	1.000
4940	The Lost Viking	☺		Julian	Warren	CadetInternational	1.000
5407	Viking 11	☺		Alistair	Dickson	CadetInternational	1.000
5479	Saynonara	☺		Jono	McLean	CadetInternational	1.000
5501	Quantum Leap	☺		Martin	Cooper	CadetInternational	1.000
5502	Encounter	☺		d	s	CadetInternational	1.000
5509	Samaran	☺		Adam	Evans	CadetInternational	1.000
5560	Something Else	☺		Elizabeth	Johnstone	CadetInternational	1.000
5612	Hullabaloo	☺		Joel	Aulich	CadetInternational	1.000
5613	Rebel	☺		Meaghan	Rich	CadetInternational	1.000
5616	Loquacious	☺		Caroline	Theodore	CadetInternational	1.000

- Run the first three (or four) races but suppress the publication of handicap results.
- Follow the menu sequence: **Admin | View | Handicap Data | Summary Data**.

SAIL...	BOAT	CLASS	DIV	AHC1	AHC2	AHC3	AvAHC	BCH1	BCH2	BCH3	AvBCH	CHC1	CHC2	CHC3	AvCHC
4109	Snake Bite	CadetInternational	1	1.000	1.010	1.023	1.011	1.041	1.069	1.111	1.074	1.010	1.023	1.039	1.024
4118	Skeeta	CadetInternational	1	1.000	0.990	0.988	0.993	0.944	0.990	0.946	0.960	0.990	0.988	0.975	0.984
4659	Red Rocket	CadetInternational	1	1.000	1.004	1.015	1.006	1.017	1.048	0.958	1.008	1.004	1.015	1.009	1.009
4664	Blue Max	CadetInternational	1	1.000	0.990	0.978	0.989	0.940	0.927	0.915	0.927	0.990	0.978	0.962	0.977
4690	Sailmaker	CadetInternational	1	1.000	1.010	1.022	1.011	1.038	1.066	1.054	1.053	1.010	1.022	1.036	1.023

This shows the handicap allocated to each race. These are the headings AHC1, AHC2 etc. The measured performance of each race is the "Back Calculated Handicap", these are in the columns BCH1, BCH2 etc. If we take the average of these measured performances (BCHs) for the first three (or four) races, it should be a reasonable point estimate of the performance of each competitor.

If we were to copy that back to race one as an initial (starting) handicap, then reprocess each race in succession, rolling the newly-computed CHC forward, experience shows this yield a very effective handicap series-score.

This is achieved as follows..

Click the BCH radio button.

SAI...	BOAT	CLASS	DIM	BCH1	BCH2	BCH3	AvBCH
4109	Snake Bite	CadetInternatio	1	1.041	1.069	1.111	1.074
4118	Skeeta	CadetInternatio	1	0.944	0.990	0.946	0.960
4659	Red Rocket	CadetInternatio	1	1.017	1.048	0.958	1.008
4664	Blue Max	CadetInternatio	1	0.940	0.927	0.915	0.927
4690	Sailmaker	CadetInternatio	1	1.038	1.066	1.054	1.053
4884	.lerhna	CadetInternatio	1	0.931		0.991	0.961

This removes all columns except the BCH columns and also provides three buttons that were not there before.

Press the Copy average HC to first race. button

Close this page and return to the main menu.

6. Select the Last Race

7. From main menu Select TopYacht Step 10 "Process Race.

PROCESS RACE No: 3 of Vic Titles

Current Series : Vic Titles

**Selected Race : 3**

**Race Date : 14/03/2004**

**Correcting Time for 4 Laps : No**

**Process Race(s)**

Process Race

0%

Click the button indicated to reprocess all races. This automatically rolls forward the computed handicaps from the previous race. Be careful in selecting your answers to the questions that the button press invokes.

8. If you really want to finesse this process, repeat steps five and six, but in step five, press the display CBCH button. This uses the clamped, back calculated handicap values from each race and discards any extreme values from an exceptionally good or poor race for the competitor.
9. Run the rest of the races as per normal but you now can publish both the elapsed time and handicap results.

## Appendix 1

Menu sequence to access handicap set up page is:

**Admin mode | Maintain | Master List | Define Edit Handicaps.**

For children or other tipsy boats e.g. skiffs, it may be appropriate to adjust parameter one to a figure closer to 50% e.g. 48% to 48%. Similarly for these two groups, it may be sensible to broaden the clamps in step seven, to say plus and minus 6% or even 7%. For definitions of these terms please refer to the help file.

Parameter five as shown above is a Exponential Placed Biased Calculation method<sup>1</sup>. For a long regatta this has been shown to provide very good handicapping.

Alternately you may prefer the exponential average system, where, on a race by race basis, the handicap for the next race will go up if they perform well and go down if they perform poorly. While this is easier for competitors to understand it also leaves the system more open to sandbagging and has been shown to provide slightly less quality handicapping than a weighted running average.

<sup>1</sup> See: [How the Next Handicap is Calculated](#).. A TopYacht Technical Article