



SSCBC Performance Handicap Rules Update Jan 2018

These handicap rules are based on the YV Keelboat Performance Handicap Rules.

THE USE OF PERFORMANCE BASED HANDICAPS

Performance based handicaps may be used to allow boats of different designs and ages with different crew skills to compete together on an equitable basis. This handicap system will function properly if the configuration of the boats and the majority of the crew remain unchanged between races.

PERFORMANCE BASED HANDICAPS

SSCBC Handicaps are based on analysis of performance in accordance with an agreed set of rules. The main characteristics of the SSCBC system are -

- a) It's free and requires no measurement
- b) It requires constant administrative support by analysis of race results and adjustment of the individual boat's handicap.
- c) It only remains valid on an interclub basis if club fleets mix on a regular racing basis, otherwise the handicap relativity from club to club may vary and results in open competition become inconsistent.
- d) A change of helmsman, crew or equipment, including different sails, can cause significant fluctuation in results.
- e) The validity of the handicap system relies on the honesty of boats to inform the Handicap Committee of helmsman, crew equipment changes and use.
- f) Most handicaps are generated from circuit races (same start and finish) with significant windward components, thus predominantly off wind courses, such as passage races will give significantly different results.

SSCBC Handicapping Rules - by relative performance

1. Divisions

- 1.1 Entries may be divided into divisions depending on their performance handicaps taking into account the owner's preference. The allocation of boats into handicap divisions will be the responsibility of the Handicap Committee.
- 1.2 If no request is made by the Boat to sail in a different division then the Boat will be placed in the division based on the start of season handicap, at the discretion of the Race Committee.

2. Conditions for the Issue and Maintenance of an SSCBC Handicap

- 2.1 The SSCBC Handicap is the measure of performance achieved by a boat/crew combination. To qualify for a SSCBC Handicap, the boat concerned must have finished in 3 races with a fair result, and with her hull, rig and crew substantially unchanged.
- 2.2 Any substantial change in hull, rig or crew combination, which is likely to change performance, must be notified to the Handicap Committee at the first opportunity, usually at least the day before racing.
- 2.3 Interpretation of such substantial changes will include:
 - change of helmsman
 - more than half of crew who have not competed in past 5 races
 - hull, centreboard or rig changes
 - new or different sails
- 2.4 Failure to notify changes may result in a standard penalty [SP] of 2.5 points added to a boats score plus an .005 penalty in the next race.
- 2.5 The host club may require owners/skippers to declare that these requirements have been met.

3. Abbreviations



AHC	Allocated Handicap	(Handicap allocated for a race)
BCT	Base Corrected Time	
BCH	Back Calculated Handicap	
LBCH	Limited Back Calculated Handicap	
LBCHU	Limited Back Calculated Handicap Upper	(104% of the Allocated handicap)
LBCHL	Limited Back Calculated Handicap Lower	(96% of the Allocated Handicap)
LBCHD	Limited Back Calculated Handicap Discard	(Discard results less than 92% AHC)
CHC	Calculated Handicap	
IPH	Initial Provisional Handicap	
L	Local Handicaps	
LDH	Long Distance Handicaps	

4. SSCBC Handicap

- 4.1 SSCBC Performance Handicaps will be issued and updated by the Handicapping Committee for each race.

5. Method of Calculation of SSCBC Handicap

- 5.1 Select the Corrected Time of the boat positioned 45% of the way down the fleet from the winning boat on Corrected Time. This then becomes the "Base Corrected Time" for that particular race.
- 5.2 Back Calculate the handicaps for each boat by dividing the Base Corrected Time by the boat's Elapsed Time: viz:-
$$BCH = BCT / \text{Elapsed Time (for each boat)}$$
- 5.3 Discard BCH values that are less than LBCHD (i.e. 51% of the Allocated Handicap).
- 5.4 Apply Limited Back-Calculated Handicaps
- If the BCH is between 51% and 97% of the Allocated Handicap then the recorded LBCH shall be LBCHL (i.e. 97% of the Allocated Handicap).
 - If the BCH is above 120% of the Allotted Handicap then the recorded LBCH shall be LBCHU (i.e. 120% of the Allocated Handicap).
- 5.5 All other BCH values to be recorded as calculated without applications of limits (i.e. between 97% and 120%), in these cases $BCH=LBCH$.
- 5.6 Maintain a record of the BCH's and LBCH's achieved by each boat on the Club Register.
- 5.7 From the Allocated Handicap and the BCH (or LBCH) for the last race, the new Calculated Handicap shall be:-
$$\text{Calculated Handicap} = 2/3 \text{ Allocated handicap} + 1/3 \text{ BCH (or LBCH)}$$
- 5.8 This new handicap is the Calculated Handicap.
- 5.9 At the discretion of the Handicapper, the Calculated Handicap becomes the new Allocated Handicap.

6. Alterations to a SSCBC Handicap

A boat may cease to qualify for a SSCBC Handicap and revert to an initial handicap at the Handicapping Committee's discretion if the boat has less than 3 SSCBC Handicap analysed results in the preceding 12 months.

7. Mixing of fleets from clubs and boats resuming competition after an extended absence

- 7.1 SSCBC receives entries from boats that have not raced against the SSCBC fleet and do not have a handicap that meets the requirements for a properly maintained handicap in accordance with Paragraph
- 7.2 For those boats the Performance Handicaps may be established and then recalculated as follows.
- 7.3 The Handicap Committee shall establish initial handicaps for the Regatta based on available Established Handicaps for boats with valid SSCBC Handicaps, and any other data available to the handicapper.

This handicap is then the Allocated Handicap for the first race.

It is noted that performance handicap data for some boats may not exist, especially for interstate boats. Thus it is recommended that a more aggressive handicap recalculation be used.



1. The Allocated Handicaps shall then be used for calculating the results of the first race.
2. Back Calculated Handicaps may then be calculated from the first race (without Limits).
3. The Allocated Handicap for the second race may be the average of the AH for the first race and the BCH for the first race.
4. Subsequent handicaps may be recalculated according to Para 5 above

8. Query on SSCBC Handicap

9. If a handicap is queried in writing then it is to be resolved by the Division Handicapper and if necessary referred to the full Handicapping Committee.
10. If the boat is not satisfied with the response then the boat's initial written query may be converted to a request for redress. The times of lodgement of the query and the responses of the Division Handicapper and Handicapping Committee will be used as the time of lodgement of the request for redress when the protest committee determines validity of the request.

11. SSCBC Handicapping Committee, Structure and Responsibilities.

- 11.1 The Chair of the Handicapping Committee is the Club Captain.
- 11.2 The SSCBC Sailing Committee appoints a Division Handicapper for each Division and Handicap Administrator.
- 11.3 The Division Handicapper assesses changes to boats' handicap variables and adjusts handicaps within the standard guidelines.
- 11.4 The Chair of the Handicapping Committee reviews changes by the Division Handicapper. The Chair has delegated this review function to the Handicap Administrator when it is not practicable for him to review a change.
- 11.5 Any decision of a Division Handicapper is a decision of the Handicapping Committee.

12. Standard Guidelines for Handicap Adjustments

- 12.1 Changes to a boat can have a significant effect on a boats performance and the Handicapping Committee will need to make the best decision it can with the information available to it.
- 12.2 The following base changes are used as a guideline as the starting point when an aspect effecting a boat changes
- 12.3

Change	Base change	Comments
Helm / Crew Changes		
Scored top 10 in a World Championship or competed at high level such as America's Cup. High Level coach or similar to ISAF Sailor classification level 3, or accomplished Coutha Boat sailor such as Tim Phillips	0.030	Adjust when skill of new helmsman is in a higher band
National Champion or highly accomplished sailor at National Level	0.020	Decrease by same when reverting to original helm
Likely to materially enhance the performance of the boat	0.010	
Little material enhancement in performance is expected	0	
Multiple Owners / Helms Where multiple people helm a boat, those details are assessed to determine if there is a specific optimal combination where an adjustment should be applied. Some standard rotations or arrangements may be approved without a handicap changes. Some rotations will have a standard adjustment.		
More than half of crew who have not competed in past 5 races	0.010	May not apply when boat is substantially crewed by "social" crew. However that result may be discarded from



		Handicap calculations
High Performance crew member	0.010	Handicap may be decreased when reverting to original crew
New or different sails		
Main & Jib	0.015	
Main or Jib	0.010	
Approved old Jib in heavy weather*	No Change	
New Equipment (each change)	0.005 to 0.020	Subjective
Multiple changes in above criteria (such as new sails and sailmaker on board for first normal race)		Use the highest percentage change and consider a further change.

* An approved old Jib is one that has been used as the primary racing Jib for a full season and specifically approved and have an appropriate measurement signature on it. It must be at least 12 months old and must not be recut or shaped from it's original approval's specification. Approval is completely discretionary and will not be given to "good" old sails or where multiple sails have been bought in a limited period of time. Different NO 1 Jibs may not be used on the same day.

Combining Handicaps from another club.

For some series it will be necessary to assign handicaps to boats that have not raced against our fleet recently, but have a club handicap against boats handicapped in each fleet.

In these cases the relative position of the unknown boat relative to the known boats at that club should transposed into the SSCBC's handicapped fleet.

This is a difficult subjective exercise.