



HANDICAP SYSTEM- Using Top Yacht 2016

Objective

- a) The purpose and aim of Handicapping within the Top Yacht software is to provide an “Allocated Handicap” (AHC) (sometimes referred to as a “Time Correction Factor”) for each competing boat so it has a fair chance of competing evenly on handicap with every other boat in races in which it competes. The AHC varies from race to race and takes into account both the speed the boat is capable of and the skill of the skipper to sail it. The AHC is actually a “Personal Handicap” for that skipper in that boat.
- b) The variation in AHC for the next race is governed by where each boat finished in comparison to the “Reference Boat”.
- c) The **Reference Boat** is that boat that placed **40%** of the way down the fleet from the winning boat on **corrected time**.

Principle

- a) The method is to compare mathematically the relative performance of all boats competing in a race by “Back-Calculating a Handicap” (BCH) using the Top Yacht Software. If each yacht had sailed the race with this BCH, every boat would dead heat across the finish line.

Results

- a) A boats “Elapsed Time” (ET) shall be calculated by subtracting its Starting Time from its “Finishing Time”.
- b) A boats “Corrected Time” (CT) shall be calculated by multiplying its “Elapsed Time” by its “Allocated Handicap” (AHC).
- c) The results of a race shall be based on “Corrected Time”, where the boat with the shortest “Corrected Time” for the race is declared to be the winner, the boat with the second shortest “Corrected Time” being second, and so on.

Handicaps

Three handicaps are involved:-

1. AHC (Allocated Handicap), a yacht starts each race with her AHC
2. BCH (Back Calculated Handicap), Top Yacht calculates this after the race
3. CHC (Calculated Handicap). Top Yacht calculates this one too and this becomes the AHC the yacht starts her next race with.

Each yacht shall be provided with an “Allocated Handicap” (AHC) at the start of each series. This handicap will be allocated by the Club Handicapper and will be the “Calculated Handicap” (CHC) from the last race sailed in the previous series. For new entrants in a series their starting AHC will be the “Class Basic Handicap” (CBH) for their yacht’s brand and length, less a % based on the skipper’s skill and experience.

At the completion of a race the Back Calculated Handicap (BCH) is calculated in accordance with the following rules.
*Top Yacht is set up, for the NHTYA’s small fleet, with an “exponential calculation for handicaps” with a gain of two.
For the race just run we take..... $\frac{1}{2}$ AHC + $\frac{1}{2}$ BCH and this is the CHC which becomes the AHC for the next race.
(For a larger fleet using exponential handicapping a gain of four would be chosen.
This would calculate thus..... $\frac{3}{4}$ AHC + $\frac{1}{4}$ BCH = the AHC for the next race.)*

Remember from above that the Reference Boat is that boat that placed 40% of the way down the fleet from the winning boat on corrected time. Well Top Yacht sets the AHC, BCH and CHC all at the same number for the Reference Boat. There will be no change to her AHC. She is the pivotal boat about which the handicaps for all boats in the next race are distributed. Yachts that finished the race earlier than the reference yacht will receive an increase in their next AHC to make it a bit harder for them to finish first in the next race. Yachts that finished the race later than the Reference Yacht will have a reduction in their next AHC to give them a better chance of winning the next race.

Top Yacht sets a 5% limit to how much a yacht’s handicap is allowed to change from race to race. That is Race 2’s AHC can vary no more than 5% from Race 1’s AHC. Otherwise wild swings in handicap could be encountered.

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