## <u>Lake Macquarie Yacht Club Handicapping System</u> <u>2022-2023 Season</u>

## Saturday Annual, Spring & Summer Pointscores

Complying with 2022-2023 LMYC Sailing Instruction (White Book) 1.27

The Lake Macquarie Yacht Club handicapping system is based on past performance. This handicap, expressed as a decimal, adjusts automatically after each race to reflect the variation in the performance of each yacht.

The current system has limits placed on these adjustments (as indicated below) to minimise the effects of extreme results which might otherwise skew the realistic performance factor for a yacht.

Without such limits, unreasonable handicaps can result from abnormal and extreme performances caused through extreme wind shifts, conditions, or breakages of equipment.

The handicap may also be adjusted manually due to changes of equipment and/or helmsman.

Below are some definitions and explanations which may assist when reading the result sheets posted and available after each Saturday point score race.

## **Definitions:**

AHC	Allocated <u>H</u> andi <u>C</u> ap = Time Correction Factor ( <b>TCF</b> ), expressed as a decimal, given to each yacht prior to each race. It is a measure of the yacht's predicted performance relative to its past history and that of the other competitors in the division.
CT, (HC Cor,d T), ET	<u>C</u> orrected <u>Time</u> determines the yacht's placing for the race. <u>E</u> lapsed <u>Time</u> CT= Elapsed Time multiplied by the handicap (CT=ET x TCF)
BCH Reference Time	A time selected to determine <b>BCH</b> s and <b>CBCH</b> for the whole division for that race.
ВСН	A <u>Back Calculated Handicap</u> is calculated retrospectively, for each yacht, after each race, in relation to the base boat. Using this <b>BCH</b> , each yacht would have had the same corrected time for the relevant race. <b>BCH</b> =corrected time (of the base boat) divided by elapsed time (of the yacht) (On Result Sheet)
СВСН	<u>C</u> lamped <u>B</u> ack <u>C</u> alculated <u>H</u> andicap limits the <b>BCH</b> fluctuations (Not on Result Sheet)
Adjusted CBCH Performance figure used in averaging	The <b>CBCH</b> including any penalties for 1 <sup>st</sup> , 2 <sup>nd</sup> or 3 <sup>rd</sup> placings in the race (Not On Result sheet)
СНС	<u>C</u> alculated <u>H</u> andi <u>C</u> ap; The handicap ( <b>AHC</b> ) for the next race = the average of (a pre-determined No of) previous Adjusted <b>CBCH</b>

## Saturday Point Score (weighted running average):

Controls and Limits	All Divisions
BCH Reference Time	The average time of the yachts placing in the range 45-55% for each Division on corrected time
СВСН	Limited to a maximum change of 5.0% either side of the yacht's handicap for that race.
Adjusted CBCH	= CBCH + Additional penalties  1 <sup>st</sup> = 1.00% 2 <sup>nd</sup> = 0.60% of the yacht's handicap proportionally applied to this race and the previous 3 races.
CHC = AHC for next race	The last <b>4</b> adjusted CBCH's are averaged.  Resulting average = new handicap for the next race but is limited to a maximum change of 1.6 % either side of the previous handicap.  The original handicap is used as (and progressively replaced by) the adjusted CBCH's until a yacht has established 4 adjusted CBCH's in the system.  Additionally, any new handicap calculated is limited to an overall maximum drop of 8% from the original handicap (at the start of the series).  (Note: Handicaps are not corrected when boats do not compete in a race)

