

A description of the handicapping system used by the Lake Jindabyne Sailing Club.

The handicapping system used by the club has been developed in-house over many, many years. It is ONLY applied to results of Twilight Races.

It has as its basis the Yardstick value that has been determined by Australian Sailing (AS) for each class of yacht. The slower the yacht, the larger its Yardstick will be. For example, a Laser Radial has a Yardstick of 118.5, a Hobie 17 has a Yardstick of 80.

What is the Yardstick used for? To adjust a yacht's finishing time, that is the actual elapsed race time, in order to "even out" the results in a race containing a mixed class of yachts.

NOTE: THE HANDICAP ADJUSTMENT IS ONLY APPLIED TO RESULTS IN TWILIGHT (Wednesday) RACES.

Yardstick corrected times example

Let's say a Laser Radial and a Hobie 17 are the only yachts in the first race of the season. The Hobie's elapsed time is 37 minutes 17 seconds and the Laser Radial elapsed time is 52 minutes 28 seconds. To determine the "real" winner of the race, the Yardstick is applied to the results.

The calculation is:
$$\frac{\text{Elapsed Time} * 100}{\text{Yardstick}} = \text{Corrected Time}$$

Laser Radial Elapsed Time = 3,148 seconds (52 mins & 28 sec) x 100 = 314,800 seconds

Divide 314,800 by 118.5 = 2,656.5 seconds

Corrected Time = 44 minutes (2,640 seconds) 16.5 seconds.

Hobie 17 Elapsed Time = 2,237 seconds (37 mins & 17 sec) x 100 = 223,700 seconds

Divide 223,700 by 80 = 2,796.2 seconds

Corrected Time = 46 minutes (2,760 seconds) 36.2 seconds.

The Laser Radial wins the race on Corrected Time.

How Handicaps are created

The clubs Handicapping System takes this time adjustment calculation one step further. The Yardstick value is adjusted after each TWILIGHT race to become the yachts HANDICAP.

There are two terms you need to be clear on.

Firstly, **Yardstick**, which is a yachts value set by AS, it does not change during the season.

Secondly, **Handicap**, which is a yachts "new yardstick" once it has been adjusted in accordance with each yacht's Twilight race results. It will usually change every time a yacht competes in a Twilight Race during the season.

For new members, the Handicap for their first Twilight race is the AS Yardstick for the yacht. For returning members, the Committee reviews all Handicaps from the previous season at the start of the new season and MAY adjust the Handicaps or carry them over unchanged.

For ALL competitors, after each Twilight race, the Handicap is adjusted depending upon the yachts finishing position in a race. (Note – the finishing position is determined on the corrected finishing time, not the elapsed finishing time).

For both monohulls and multihulls, a first or second place will see the yachts Handicap reduced, a third place will see a yachts Handicap remain unchanged, whilst a fourth or more will see the yachts Handicap increased.

When a yacht's Handicap is increased, it reduces the Corrected Time thus making it easier to win a race. When a yacht's Handicap is reduced, it increases the Corrected Time thus making it harder to win a race.

OK, so by how much does a yacht's Handicap get adjusted after a race? Here are the values for both monohulls and multihulls.

For a 1st place, the Handicap is reduced by 2% of the yacht's Yardstick.

For a 2nd place, the Handicap is reduced by 1% of the yacht's Yardstick.

For a 3rd place, there is no adjustment made.

For a 4th place, the Handicap is increased by 1% of the yacht's Yardstick.

For a 5th place, the Handicap is increased by 1.5% of the yacht's Yardstick.

For a 6th place, the Handicap is increased by 2% of the yacht's Yardstick.

For a 7th place, the Handicap is increased by 2.5% of the yacht's Yardstick.

For an 8th place, the Handicap is increased by 3% of the yacht's Yardstick.

For a 9th place, the Handicap is increased by 3.5% of the yacht's Yardstick.

For 10th and subsequent places, the Handicap is increased by 4% of the yacht's Yardstick.

SPECIAL NOTE – The adjustment percentage is applied to the yacht's YARDSTICK value (which does not change) and NOT the yachts HANDICAP value (which does change).

Handicap corrected times example

So, using the result of the two yachts race above, the Laser Radial has come first so its Handicap will be reduced by 3%.

Thus $118.5 - 2\% = 116.1$ which becomes the yacht's Handicap for the next Twilight race.

For the Hobie 17 a second place means its Handicap will be adjusted by 1%.

Thus $80 - 1\% = 79.2$ which becomes the Yacht's Handicap for the next Twilight Race.

For the sake of the example, let's say a Hobie 16 comes third in the race and a Laser full rig comes fourth. The Handicap of the Hobie 16 would not be adjusted and the Laser full rig's handicap would increase by 1% to 115.1.

Further let's say a Flying Fifteen comes fifth. The Handicap would be adjusted by +1.5%. The standard Yardstick of a Flying Fifteen is 109, thus $109 + 1.5\% = 110.6$ which becomes the yacht's Handicap for the next Twilight race.

Now let's progress to the next Twilight race.

Say the Flying Fifteen wins the race, the Laser full rig comes second, the Hobie 17 comes third and the Laser Radial comes fourth.

Yacht	Yardstick	Race 2 Result	Race 2 H/cap Adjustment percentage	Race 2 H/cap Adjustment amount	Old Handicap	New Handicap
Flying 15	109	1 st	- 2%	-2.2	110.6	108.4
Laser full rig	114	2 nd	- 1%	-1.1	115.1	114
Hobie 17	80	3rd	0	0	79.2	79.2
Laser radial	118.5	4th	+ 1%	+1.2	116.1	117.3
Hobie 16	80.5	5th	+ 1.5%	+1.2	80.5	81.7

* Yardstick multiplied by the Adjustment Percentage.

Note - Handicap values are rounded to one decimal point.

The ultimate aim of the Handicapping System is to spread the results amongst all competitors. That is, the more a sailor wins, the harder it becomes to continue winning because their decreasing Handicap is increasing their elapsed time. The sailor finishing mid-field, will eventually win because their increasing Handicap is decreasing their corrected time.

And it works!

In season 2022-23 there were 10 different winners in Division 1 and 10 different winners in Division 2 Twilight races. In season 2021-22 there were 12 different winners in Division 1 and 7 different winners in Division 2 Twilight races.

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