



VNSC Handicap system

How does it work?

Basic principles



- Boats
 - Different sail sizes, make similar boats sailed by equally competent sailors move at different average speeds – smaller sail size >> lower speed
 - Boat handicap (on the water) compensates for these differences, so that in average conditions and equal sailors' competences, all boats have equal chance of winning
- Sailors
 - Different sailing competences, make similar boats move at different average speeds – more competent: >> higher speed, and vice versa.
 - Personal handicap compensates for different sailing competences, so that all sailors have an equal chance of winning, if they sail at or above their own competence level

Boat handicap



- If all boats are Lasers and all sailors are equally competent, the only thing that matters is sail size.
 - If Standard = 100% boat speed, then
 - Radial = 96% boat speed (4% slower), and
 - 4.7 = 91% boat speed (9% slower)
- Or if
 - Standard finishing time is X (seconds), Radial finishing time is Y and 4.7 finishing time is Z , then
 - Radial compensation is $Y \times 0.96$, and
 - 4.7 compensation is $Z \times 0.91$

Example Boat handicap



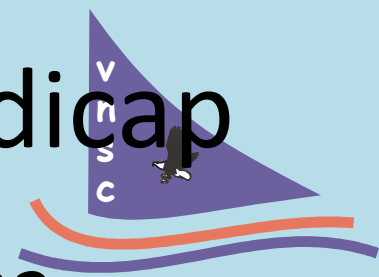
- Laser Standard finishes a race in 40:35 = 2435 seconds
- Radial finishes the same race in 41:20 = 2480 seconds
- 4.7 finishes the same race in 44:09 = 2649 seconds
- Compensation:
 - Standard sail: no compensation
 - finish time = **2435** seconds
 - Radial sail: 4% compensation
 - finish time = $2480 \times 0.96 =$ **2381** seconds
 - 4.7 sail: 9% compensation
 - Finish time = $2649 \times 0.91 =$ **2411** seconds
- Final Boat Results: 1st Radial; 2nd 4.7; 3rd Standard

Race handicap and Personal handicap



- Your **race handicap** for a race is your finishing time divided by the average finishing time of all sailors in that race
- Your **personal handicap** is calculated monthly by averaging your **race handicaps** for the last 12 races
- A member who has a higher handicap, for example 105%, sails 5% slower than the club average
- A member who has a lower handicap, for example 91%, sails 9% faster than the club average
- Club average is 100%
- The maximum handicap you can get is 120

Example Race/Personal Handicap



- You have finished a race in 38:12 = 2292 seconds
- The average (corrected) finishing time for that race for all sailors was 36:20 = 2180 seconds
- Your **race handicap** for that race was $2292/2180 = 1.05$. You have sailed 5% slower than average in that race
- We calculate your **personal handicap** by averaging your **race handicaps** over your last 12 races

Example **Personal** handicap



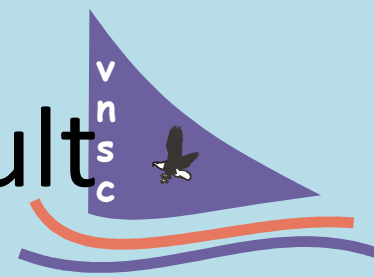
- Assume
 - you have a personal handicap of 105
 - Margaret has a personal handicap of 98
 - Gordon has a personal handicap of 91
 - You are all sailing a Radial sail, therefore boat handicap/sailsizes does not matter
- Racing
 - Gordon finishes in (min:sec) 30:45 = 1845 seconds
 - Margaret finishes in (min:sec) 33:30 = 2010 seconds
 - You finish in (min:sec) 35:20 = 2120 seconds
- Calculation:
 - Gordon finishing time is $\frac{1845}{91} \times 100 = 2027$ seconds
 - Margaret's finishing time is $\frac{2010}{98} \times 100 = 2051$ seconds
 - Your compensated finishing time is $\frac{2120}{105} \times 100 = 2019$ seconds
- Result: You are 1st, Margaret is 2nd, Gordon is 3rd

Boat and Personal handicap combined



- In **boat handicap** races, only the boat (sail) handicap is applied to the finishing times
- In **personal handicap** races, like the monthly mug, first the boat handicap and then the personal handicap is applied to the finishing times
- You win a race when you have the lowest compensated finishing time for that race

Calculating a Regatta Result



- A regatta, or series, consist of a set of races, usually three, sometimes more
- The winner of a race gets 1 point, number 2 gets 2 points, 3 gets 3 points etc.
- At the end of the series, your scores for each race are added up
- The person with the lowest combined score wins the regatta.

Example regatta



Race	Gordon		Margaret		You	
	Boat	Personal	Boat	Personal	Boat	Personal
1	1	2	2	1	3	3
2	2	3	1	2	3	1
3	1	2	2	3	3	1
Total	4	7	5	6	9	5

- Results Boat Handicap: 1st Gordon, 2nd Margaret, 3rd You
- Results Personal Handicap: 1st You, 2nd Margaret, 3rd Gordon