



ISORA Race Scoring System 2011 **High Scoring System and CHIP's 3**

It was decided in the 2010 ISORA Annual General Meeting that the scoring system would be changed from the traditional low scoring system (RRS Appendix 4) to a High Scoring System, that longer cross channel races would be weighted with a difficulty factor and that scores in larger fleet sizes would be scored appropriately higher.

Background

ISORA has traditionally been a series of cross channel races of similar length and similar number of competitors. Over the last few years off-shore racing has seen a revival and the race program has become more varied with the introduction of relatively smaller day races.

The number of competitors has also grown with 39 boats competing in 2010. The fleet size has varied from 3 to 23 with the average fleet size over the 9 races at 15 competitors.

It became apparent that a more appropriate scoring system was required to reflect the varying fleet size by rewarding a placing in a large fleet and a system which rewards a placing in a relatively harder or longer cross channel race.

On researching the subject of long series scoring systems we found that our difficulties had been encountered by others. Various formulas and table based adjustments are available and used by other race organisers throughout the world. Most of these systems, however, use the 'High Scoring' system as opposed to the traditional 'low-point' systems where higher scores are better than lower; they work the opposite of our existing low-point system where a lower score is better. (First Place would score 1 point in the low point system and 100 in a high score system).

We looked at applying a difficulty factor (weighting) and having researched and tested various weighting factors we have concluded that the following would be appropriate.

- Day Race - **1.0**
- Cross channel - 75 miles **1.1**
- Cross channel , 75 miles **1.2**

With this weighting and using the high scoring system a first place would score 100, 110, and 120 respectively.

We have found that there are many formulas and table based adjustments available to reward a placing in a large fleet. RORC use the high scoring system with difficult races being weighted and fleet size adjustments made by the 'Cox-Sprague System'.

Further research showed that the 'Cox-Sprague System' has fallen out of favour and has been replaced by some organisations with the 'Rinderele B' system. This has also now been replaced by the 'Chipstead' or 'CHIPS' system which is now in its third version, 'Chips3'.

Applying the CHIPS 3 adjustments to the 1st, 5th and 10th place boat with varying Race Weights produces the following scores:

Weight	Fleet of 5			Fleet of 10			Fleet of 15			Fleet of 20		
	1 st	5 th	10 th	1 st	5 th	10 th	1 st	5 th	10 th	1 st	5 th	10 th
1.0	92.7	50.1	0.0	96.8	66.2	27.9	98.6	75.4	46.5	99.4	88.1	58.3
1.1	102.0	55.1	0.0	106.5	72.8	30.7	108.4	83.0	51.2	109.3	89.2	64.1
1.2	111.3	60.1	0.0	116.1	79.4	35.5	118.3	90.5	55.8	119.2	97.3	69.9

A boat that did not compete in a race (DNC) is scored 0 and a boat retiring from a race (DNF) is scored the equivalent points as the last number of starters + 1 placing.

Conclusion

At the 2010 ISORA AGM it was passed that the results for ISORA 2011 race series is scored using the 'High Scoring System', that the difficult races are weighted by a factor of 1.1 for cross channel races less than 75 miles, 1.2 for races cross channel greater than 75 miles and the fleet size adjustment is made by using the 'CHIPS 3' formula.

References:

Cox-Sprague System', RORC, Rinderele B, CHIPS.

Further information and for those interested in the maths behind the results please refer to :
http://www.rmsail.org/Race_Mgt/chips3.shtml or <http://styvechale.net/pdf/chips3.pdf>

A lengthy description of its evolution is at <http://styvechale.net/pdf/chips3.pdf>. Another description is at "All about CHIPS" on the Chipstead, UK Sailing Club website.