

## FYCA Race Result and RYA YR2 Performance Spreadsheet

Race		Date	Start time		SCT		FYCA_YR2.xls issue C						
Gavin Adamson Memorial - Div1		26-Aug-18	12:30:00		2:54:48		Standard corrected time						
Boat Name	Class	Sail No.	PY	H/cap	Finish	Elapsed	Laps	Corrected	Place	Achieved	%	YR2	SCT
			H/cap	status	time	time		time		performance			input?
Brave	Sigma 33	GBR4580	940		15:06:20	2:36:20		2:46:19	1	894	-4.9%		yes
Eurobo	Ro 330	GBR8271T	916		15:10:47	2:40:47		2:55:32	2	920	0.4%		yes
Henceforth	Corby 29	GBR7205R	858		15:01:25	2:31:25		2:56:29	3	866	1.0%		yes
Hardslog	x332	GBR 7349R	859		15:05:22	2:35:22		3:00:52	4	889	3.5%		yes

**Notes:**

FYCA race result spreadsheet with RYA YR2 'achieved performance' calculation modified to include 'Club Number' (CN) status boats. PY H/cap should be the agreed Portsmouth Yardstick handicap for each boat. H/cap status is the Portsmouth Yardstick standing of the handicap value for each boat. PY = Primary Yardstick; SY = Secondary Yardstick; RN = Recommended number; CN = Club number; TN = Trial number. PY, SY & RN handicaps are published annually in the RYA YR2 listing. CN status is for boats about which clubs have significant performance evidence and may be rated as such in the FYCA yacht handicap list. TN status is for boats with no published handicap and insufficient performance evidence to date. Corrected times are rounded to the nearest second to reflect realistic timing accuracy. If two or more boats have identical corrected times, they will have the same placing & the next boat will be two or more places behind.

**Performance Assessment:**

The racing performance of boats, in percentage terms relative to handicap, is a 'skewed' distribution with a broader 'tail' on the poor performance side since it is easier to sail slowly rather than fast. The Standard Corrected Time (SCT) is defined as the corrected time achieved on average by the largest group of boats, i.e. those boats that sailed 'to handicap' or ~0%. This is the 'mode' of the distribution. Individual boat performances can then be calculated by comparison with the SCT.

The RYA YR2 procedure allows for the typical 'skewed' distribution and calculates the SCT using only the PY, SY & RN status boats. Since these make up only 1/3 of the Forth yacht fleet, FYCA has modified the YR2 procedure to include CN status yachts, representing a further 1/3 of the fleet. TN boats are excluded because their handicaps are not well enough established. The average of corrected times for the top two thirds of the PY, SY, RN & CN boats in the race gives the Average Corrected Time (ACT). A further +5%, corresponding to the average performance relative to handicap 2/3 down the fleet, is added to define the 'poor performance' limit. The corrected times of all PY, SY, RN & CN boats faster than ACT+5% are then averaged to give the SCT for the race.

In this spreadsheet, the SCT is only considered valid if two or more boats contribute towards it, otherwise performance data is not displayed. The elapsed time for each boat is divided by the SCT and normalised relative to 1000 to give its 'achieved performance'. Performances slower than ACT+5% are shown as 'Slow' and should be excluded in calculating a boat's average performance for handicap assessment.