

Sportsboat Class Definition:

Sportsboats are generally viewed as lightweight planing yacht designs that have distinctly different performance characteristics compared to conventional displacement yachts. If race conditions permit hydrodynamic planing then standard handicap values, that are mainly based on displacement performance, are not representative. Yachts with RORC Sportsboat Ratings (SBR) range from those that plane readily such as the Melges 24, Cork 1720 and Laser SB3, to more conventional designs that do so only rarely. FYCA clubs organising separate classes for sportsboats and displacement yachts, to promote better and fairer competition whatever the wind and sea conditions, require a sportsboat definition to differentiate between 'high performance' and more conventional sportsboats. The FYCA Handicap Committee proposes a sportsboat definition based on design analysis rather than arbitrary classification. After consultation with Mike Urwin, Technical Director of the RORC Rating Office that provides IRC and SBR certification, the following 'high performance' sportsboat definition is recommended:

- **Downwind power to weight ratio ≥ 0.50**
($SA/D^{0.67}$ based on total downwind sail area m^2 [Main+Spin] divided by total displacement $Kg^{0.67}$ [Including crew weight])
- **Displacement to length ratio ≤ 170**
($DLR = (27.87 \times IRC \text{ Displacement})/LWP^3$ as defined by RORC measurement rules)

Appendix A details the analysis of sportsboat designs compared to conventional displacement yachts.

The following SBR rated designs are classified as 'high performance' sportsboats:

- Melges 24
- Cork 1720
- Laser SB3
- Delphia 24
- RS-K6
- J-80

The following SBR rated designs are not classified as 'high performance' sportsboats:

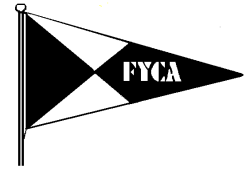
- Projection 762
- Beneteau 24
- Hunter 707
- RS Elite
- Sonar

FYCA Handicap Committee

2nd Dec 2009

Forth Yacht Clubs Association is the forum for clubs on both sides of the Firth

Forth Yacht Clubs Association



Appendix A:

Yacht Design Data:

	P	E	MHW	MAIN	SPA	SA	BW	Crew	DISP	SA/DISP ^{0.67}	DLR	Pole/Bowsprit
	m	m	m	m ²	m ²	m ²	Kg		Kg			
Melges 24	8.81	3.80	2.70	21.45	55.96	77.41	822	4	1292	0.64	99	Bowsprit
Laser SB3	8.10	3.30	2.33	17.06	47.26	64.32	685	3	1075	0.60	132	Bowsprit
Cork 1720	10.02	4.04	2.63	24.61	69.37	93.98	1365	5	1915	0.59	131	Bowsprit
Delphia 24	8.65	3.60	2.57	20.01	50.08	70.09	850	4	1320	0.57	64	Bowsprit
J 80	9.14	3.81	2.48	21.17	65.00	86.17	1473	4	1943	0.54	156	Bowsprit
RS K6	7.09	2.94	2.08	13.32	29.57	42.89	300	3	690	0.54	89	Bowsprit
J-92S	11.90	4.25	2.70	30.32	81.35	111.67	2575	6	3205	0.50	180	Bowsprit
Projection 762	9.35	3.62	2.36	20.60	50.82	71.42	1300	5	1850	0.46	148	Pole
Beneteau 25	9.41	3.65	2.37	20.85	44.47	65.32	1249	4	1719	0.44	150	Pole
Mumm 36	13.63	5.02	3.21	41.17	75.53	116.70	3558	8	4348	0.43	135	Pole
Hunter 707	8.80	3.76	2.46	20.18	37.80	57.98	1083	4	1553	0.42	135	Pole
Corby 29	11.70	3.94	2.55	27.93	77.27	105.20	3154	7	3864	0.42	225	Pole
Fast 42	14.50	5.82	3.78	51.24	97.97	149.21	6560	11	7590	0.38	178	Pole
Sonar	8.34	3.41	2.28	17.57	29.95	47.52	925	4	1395	0.37	132	Pole
First 36.7	13.85	4.75	3.00	39.30	83.45	122.75	5441	9	6311	0.35	211	Pole
Sun 49 Perf	16.50	5.40	3.65	55.40	145.97	201.37	12400	13	13590	0.34	173	Pole
RS Elite	7.80	2.98	2.22	15.33	26.39	41.72	990	3	1380	0.33	162	Pole
Ro-340	11.95	4.19	2.69	30.20	62.51	92.71	4100	7	4810	0.32	227	Pole
First 30 ES	11.30	3.72	2.39	25.36	57.81	83.17	3510	7	4220	0.31	266	Pole

