2007 Forts Race sponsored by www.cat-bitz.co.uk

Each year Whitstable's Forts Race poses different challenges for top racers from all the leading fast catamaran classes to determine both the best boat and crew over 100 km. racing in one day. This year that challenge was drag racing in light winds.

The unique hub and spoke format of the course is designed to produce the fairest possible test over a variety of conditions, with five 7 to 13 km. legs radiating out from the yacht club and back. These include open sea legs out to the old WW2 Forts and the new Kentish Flats wind farm, coastal legs to Herne Bay and the Isle of Sheppey and a leg up the Swale Estuary.

Faced with a flat calm at the advertised start time and a forecast of light winds tracking from NW to East, Race Officer Don Findlay prudently delayed till his spies reported 8 mph NNE out at the Forts, before sending the fleet off northwards in that direction after one general recall. This was a test of pointing ability that best suited the lightest of competitors in Spitfires.

However the return leg was the tightest possible kite run at which the wider Tornados had the advantage of greater righting moment. In the other classes this leg separated the top crews who could fly kites twin-wiring from less athletic competitors.

For the second leg, northwest along the Sheppey coast, it was a case of repeating this performance with kites up on the other tack. The return was another tight fetch on the other tack as the wind tracked round eastwards with crews leaping in and out on the trapeze on any gust.

The third leg, north east to the wind farm provided the first opportunity for tacticians rather than boat speed experts. On the right-hand side those that chose the inshore route along Tankerton heights to exploit the wind bend along the shore, faced a major header when turning out to sea. On the left-hand side, those who tacked off on port straight out to sea and footed off for speed through the chop found themselves forced into a long tack on starboard to reach the mark. The advantage went to those who could easily lift a hull. These cats could make it to the mark in almost one hitch. That benefited the lighter Inter 20 over the wider Tornados.

Decent wind on the return leg tempted many to hot it up aiming high towards the shore at Herne Bay. However they lost out badly by sailing into lighter winds inshore. Meanwhile those like the leading Hurricane SX who sailed deep gained up to a dozen places.

Given the light wind conditions, it became increasingly likely that the course would be shortened on the return leg if the easterly sea breeze died. At the front of the pack this produced an exciting battle for line honours between the leading Inter 20 and Tornado, which the Inter ultimately won. Unfortunately the wind did die off leaving the back of the pack to struggle against increasing tide and force several retirements. Thanks to <u>www.cat-bity.co.uk</u> there were prizes for all competing classes.

Results

1 st Overall	F18 Capricorn	James & Gillian Power	RYA
2 nd Overall	F18 Nacra	Adam Piggott & Raby Garcka	Weston
3 rd Overall	F18 Capricorn	Stuart Gummer & Ellen Forshaw	Stokes Bay
1st F16	Spitfire	Chris Sproat & Georgina Burke	Stokes Bay
1 st F20	Inter 20	Nick Elmore & Kyle Stoneham	Thorpe Bay
1 st Tornado	Marstrom	Nick Barnes & Stuart Smith	Brightlingsea
1 st Hurricane	White Formula	Steven Pimblett & Paul Moore	Whitstable
1 st Local	F18 Hobie Tiger	Toby Orpin & Toby Winchester	Whitstable

For more information contact Nick Dewhirst Tel 01227-282625 Email Dewhirst@btinternet.com

ANALYSIS

The Forts Race creates a unique opportunity to analyse the performance of different types of catamaran against each other, because its hub and spoke format enables intermediate times to be taken over long legs, ranging between seven and thirteen kilometres.

This year it provided a good opportunity to test the SCHRS handicap system in light wind conditions with little tide. That can be done by comparing the best result achieved in each type of catamaran, on the principle that they are sailing as close to handicap as possible. Entries in excess of 40 competitors, all racing three sailed catamarans within a 10% range of rated performance provided a close test sample of sailing characteristics. There were between 3 and 17 competitors in the five participating classes, namely Formulas 18 and 20, Hurricane SX, Spitfire and Tornado.

The attached table shows adjusted times and positions separately on each leg, together with the overall final position for all competitors. At the bottom there is a summary for the best position achieved by each class. Please note that this is not necessarily the same competitor on each leg.

As the first two legs were similar, the Forts and Spile results should be viewed together. The first was a tight beat on starboard, with a tight kite run on port, while the second leg was a tight kite run on starboard, followed by a tight beat on port. Wind strength was constant between 5 and 10 miles per hour. Tactics played virtually no part as the wind direction meant that these were essentially drag races.

The summary by class shows that there was little difference between four of the five classes – the best being first and the worst, with one exception, being sixth place. This amounted to a difference in adjusted performance within only 7%. The only exception was for Formula 20, where the Spile leg was far worse. However that should not be taken too seriously as there were only three competitors in this class and the result was not representative of its third place on the Forts leg, where it was third.

The only class whose results were out of line was the Hurricane SX, where the best competitor could manage no better than fourteenth place on either leg. The best Hurricane was respectively 13.6% and 8.3% slower on adjusted time than the fastest type of catamaran in the Forts and Spile legs.

The third leg out to the Windfarm was a genuine upwind / downwind affair, with tactical options that significantly influenced performance as the wind was stronger for those who chose to stay out to sea. Comparisons were also made more difficult because the wind died at the end, leaving tail-enders out of time.

Nevertheless only seven places separated the best competitors in each class representing again only 7.1% difference in adjusted performance. Once again the Hurricane SX was the only class whose results were seriously out of line as the best performer could manage no better than seventeenth place.

As to the battle between the two largest classes, Formula 18 and Tornado, it is clear that the Formula performed better in all the conditions encountered on the day. However it should be noted that these did not include a square reach, nor high winds. Such conditions could be expected to favour the Tornado because of its greater beam and length.

Results of the 2007 Forts Race therefore support the conclusion that the SCHRS handicap system is broadly fair not only in theory but also in practice, at least within this narrow range of cats with the probable exception of the Hurricane.

For more information contact Nick Dewhirst Tel 01227-282625 Email Dewhirst@btinternet.com

Class T		SailNo	Helm	Crew	Club		Adjusted Time on Each Leg			.eg	Position on Each Leg			
	Туре					Rating	Forts	Spile	Windfarm	Final	Forts	Spile	Windfarm	Final
Formula 18	Capricorn	GBR 016	James Power	Gillian Power	RYA	1.005	0.0%	0.0%	2.7%	0.0%	1	1	2	1
Formula 18	Nacra Infusion	794	Adam Piggott	Raby Jon Garcka	Weston	1.005	5.3%	2.2%	2.8%	2.7%	4	2	3	2
Formula 18	Capricorn	GBR 696	Stuart Gummer	Ellen Forshaw	Stokes Bay	1.005	3.1%	9.8%	0.0%	2.7%	2	19	1	3
Spitfire	Special Rig	158	Christopher Paul Sproat	Georgina Burke	Stokes Bay	1.035	7.0%	3.5%	3.6%	4.0%	6	4	4	4
ormula 18	Nacra Infusion	747	Will Sunnucks	Simon Farren	Brightlingsea	1.005	8.8%	2.4%	3.6%	4.4%	9	3	5	5
Formula 20	Inter	1055	Nick Elmore	Kyle Stoneham	Thorpe Bay	0.949	4.3%	9.2%	5.3%	4.9%	3	18	6	6
ormula 18	Nacra Infusion	GBR 695	Grant Piggott	Greg Windle	Weston	1.005	7.5%	8.3%	8.2%	7.0%	8	15	10	7
ormula 18	Capricorn	GBR 120	Tim Neal	Bob Fry	Parkstone	1.005	8.9%	7.4%	7.4%	7.0%	10	10	9	8
ormula 18	Hobie Tiger	GBR 2221	Toby Orpin	Toby Winchester	Whitstable	1.005	7.3%	7.7%	9.3%	7.1%	7	11	13	9
ornado	Marstrom	409	Nick Barnes	Stuart Smith	Brightlingsea	0.935	9.7%	4.7%	8.6%	7.1%	13	6	11	10
ornado	Marstrom	GBR 413	Simon Northrop	Jeremy Carter	Minnis Bay	0.935	6.7%	6.5%	11.3%	7.2%	5	8	14	11
ormula 18	Nacra Infusion	GBR 740	Rob Lawes	Peter Barnard	Whitstable	1.005	9.1%	7.7%	8.7%	7.6%	11	12	12	12
Fornado	White Formula	1	Aaron Young	Rob Butterfield	Datchet Water	0.935	9.5%	9.1%	13.2%	9.7%	12	16	15	13
ornado	Marstrom	GBR 408	Kevin Turner	Lloyd Turner	Island Yacht Club	0.935	13.9%	11.9%	7.3%	10.1%	21	23	8	14
Formula 18	Nacra Mark One	GBR 539	Huw Reynolds	Mike Smith	Whitstable	1.005	10.2%	13.4%	15.8%	11.9%	15	27	18	15
Spitfire	White Formula	106	Henry White	Todd Grady	Brightlingsea	1.035	11.7%	4.5%	21.2%	12.2%	16	5	24	16
ornado	Marstrom	GBR 422	Mick Davidson	J Moody-Smith	Whitstable	0.935	14.6%	12.7%	13.7%	12.7%	23	26	16	17
Formula 20	Inter	184	Ian Conchie	Mark Sutcliff	Netley	0.949	17.3%	18.0%	7.0%	12.8%	29	36	7	18
lurricane 5.9	SX	361	Steven Pimblett	Paul Moore	Whitstable	1.007	16.3%	11.8%	14.3%	13.5%	25	22	17	19
ornado	Marstrom	411	Peter Wilson	Stephen Hadler	Whitstable	0.935	16.1%	12.1%	17.5%	14.5%	24	24	20	20
ormula 18	Inter	212	Charles Lindsay	Fergus Jack	Stokes Bay	1.005	13.4%	12.4%	20.8%	14.7%	18	25	23	21
Formula 18	Nacra Infusion	GBR 18	Nick Dewhirst	Simon Jones	Whitstable	1.005	20.0%	9.2%	16.3%	15.0%	37	17	19	22
lurricane 5.9	Square Top	482	Kevin Skinner	Dave Watkins	Minnis Bay	1.007	13.6%	8.3%	25.6%	15.3%	19	14	26	23
Formula 18	Hobie Tiger	2237	Oliver Northrop	Stuart France	Whitstable	1.005	9.8%	10.9%	28.6%	15.5%	14	20	28	24
Fornado	Marstrom	GBR 419	Paul Mines	Paddy Carr	Brightlingsea	0.935	17.2%	14.1%	18.2%	15.7%	28	28	22	25
Formula 20	Inter	1056	Graham Barnett	Trevor Bulmer-Jones	Netley	0.949	18.9%	19.7%	17.8%	17.6%	34	38	21	26
Spitfire	White Formula	99	Richard James Golden	Edward James Hooper	Hayling Ferry	1.035	14.5%	8.1%	34.8%	18.8%	22	13	32	27
ornado	Marstrom	396	Geoff Mylcrist	Ben Cador	Whitstable	0.935	21.4%	16.4%	21.9%	19.2%	38	33	25	28
Tornado	Marstrom	405	Abby Ledger	Christian Brewer	Whitstable	0.935	16.5%	15.2%	29.2%	19.5%	27	31	29	29
Fornado	Marstrom	GBR 400	Stephen Buckle	Hugh Costello	Whitstable	0.935	18.9%	15.0%	26.9%	19.6%	33	30	27	30
ornado	White Formula	9	Andrew Priechenfried	Budge Priechenfried	Shellness	0.935	18.2%	16.5%	32.6%	21.6%	30	34	31	31
ornado	White Formula	GBR 318	James O'leary	Tom O'leary	Pevensey Bay	0.935	22.6%	19.2%	31.9%	23.8%	40	37	30	32
Spitfire	White Formula	51	Paul Mylcrist	Jack Skipper	Whitstable	1.035	19.4%	24.2%	76.5%	39.0%	35	39	33	33
ormula 18	Hobie Tiger	781	Peter Bramley	Andrew Kelly	Tankerton	1.005	22.4%	14.4%	92.1%	43.1%	39	29	34	34
ormula 18	Hobie Tiger	1737	Peter King	Laurie King	Whitstable	1.005	18.7%	11.2%			32	21	RTD	RTD
ormula 18	Hobie Tiger	1665	David Williams	Roger Fermor	Whitstable	1.005	13.7%	16.8%			20	35	RTD	RTD
Spitfire	White Formula	53	Stewart Smith	Chris Goymer	Grafham	1.035	13.1%	6.4%			17	7	RTD	RTD
lurricane 5.9	SX	393	Steve Mansell	Mike Lenton	Rutland	1.007	16.5%	15.5%			26	32	RTD	RTD
Spitfire	White Formula	174	Simon Reynolds	Simon Sparrow	Whitstable	1.035	19.4%	6.7%			36	9	RTD	RTD
ormula 18	Dart Hawk	796	Richard Ledger	Darrn Borne	Whitstable	1.005	18.3%				31	RTD	RTD	RTD
ormula 18	Hobie Tiger	2119	Jonathan Barrett	Jeremy Reffin	Whitstable	1.005					RTD	RTD	RTD	RTD
ormula 18							0.0%	0.0%	0.0%	0.0%	1	1	1	1
Spitfire							7.0%	3.5%	3.6%	4.0%	6	4	4	4
Formula 20							4.3%	9.2%	5.3%	4.9%	3	18	6	6
Fornado							6.7%	4.7%	11.3%	7.1%	5	6	8	10
lurricane							13.6%	8.3%	14.3%	13.5%	19	14	17	19

WYC FORTS RACE 2007

Course Map with approximate compass bearings, distances and location of marks

WYC Tel 01227-272942

