TABLE 1

Hydrodynamic Performance Comparison of High-Speed-Small-Craft

(See Fig. 1)

Sym	No	Name of Craft	Builder	Δ[t]	V[knot]	p[kw]	Fn∇	EPS	H.P.R*** Rating
		Round bilge Displacement and Semi-Displacement Craft							
⊡	1	Type S 143	Lürssens	375.00	38.0	13235	2.330	0.184	12.540
⊡	2	PB	Italy	1361.00	15.0	4706	0.740	0.046	16.110
⊡	2a	Sherger, Lürssens	Bremen - Germany	188.00	45.5	11290	3.130	0.262	11.920
		Deep - V - Planing Craft							
o	3	PT	Damen	85.00	24.0	1847	1.880	0.186	10.12
o	4	Cohete	Lewi Dsgn	60.00	24.0	1544	2.000	0.213	9.38
o	5	SAR33	Abekg&Rasm	250.00	40.0	13235	2.620	0.262	10.08
o	6	Zarcos 16	Lewi Dsgn	22.00	25.0	735	2.460	0.265	9.27
o	7	Zarcos 12	Lewi Dsgn	8.00	24.0	243	2.790	0.251	11.12
o	8	Nasty Class	Norway	83.00	44.0	4559	3.470	0.248	14.00
o	9	P2 000	G.B.	49.00	40.0	2118	3.440	0.214	16.00
o	10	P2 000	Dheeb Al Behar	49.00	36.0	1765	3.100	0.198	15.60
o	11	Intermar.	MK55	165.00	50.0	10294	3.510	0.247	14.19
o	12	Ilikai	Lewi Dsgn	9.00	28.0	412	3.190	0.324	9.84
		Hydrofoil Craft							
△	13	PT 20	Supramar	33.00	34.0	810	3.12	0.143	21.82
△	14	PT 50	Supramar	63.00	34.0	1620	2.80	0.149	18.81
△	15	PT 75	Supramar	78.50	36.0	2420	2.86	0.170	16.83
△	16	PT 150	Supramar	150.00	36.0	5058	2.57	0.186	13.81
△	16a	PT 150	Supramar	150.00	36.0	with start. power boosting			
△	17	High PointPCH1	USA	120.00	48.0	4706	3.56	0.162	21.94
△	18	Tuccumcari	USA	52.00	49.0	2941	4.50	0.23	18.206
△	19	Plainview AGEH-1	USA	320.00	50.0	20588	3.15	0.255	12.32
△	20	PHM Nato Hydr.	Boeing	218.00	50.0	19265	3.35	0.350	9.52
		Recently built Craft and Catamarans							
o	21	Sea Link Cat. Ferry		50.00	29.0	1430	2.490	0.196	12.680
o	22	Jet Cat Ferry JC-1		73.00	32.5	2100	2.620	0.176	14.860
o	23	EM1, China SH. Tradg		78.00	37.0	3529	2.940	0.243	12.120
o	24	Dvora, Israel Airc. Ind.		47.00	34.0	2000	2.940	0.248	11.870
o	25	Olympic 76	Greece	50.00	30.0	1912	2.570	0.253	10.160
o	26	Span. Cust: Craft (with Ri.CaL Jets)		15.00	55.0	1470	5.760	0.353	16.310
o	27	Indonesian Wat.jet. PT Kodja	PT Kodja	4.09	28.3	172	3.680	0.295	12.470
o	28	P1200	G.B.	13.00	36.0	810	3.860	0.343	11.250
o	29	Precision Offshore 17	Australia	22.00	38.0	1375	3.730	0.326	11.450
o	30	HYSUCAT 18	Technautic Thailand	36.50	36.0	1240	3.250	0.187	17.500
o	31	HYSUCAT 9	Tank predict	33.50	40.0	950	3.660	0.141	26.000
o	32	PT 14.5 Singap. S. + E.		23.00	30.0	934	2.930	0.268	10.933
o	33	HYSUCAT 27	Lürssens, Dsgn-Tank pred.	140.00	40.0	4412	2.890	0.157	18.400
o	34	Tropic Sunbird Cat.	SFB-Eng. Austr.	127.00	28.0	2320	2.050	0.129	15.890
o	35	Tassie Devil 2001	Int. Cat. Tasmania	72.00	26.0	1660	2.420	0.148	16.350
o	36	AZ60	Azimut, Italy	30.00	28.0	1118	2.610	0.264	9.880
o	37	Norsul Cat., Fjelstrd.	Norway	84.00	26.0	1956	2.040	0.178	11.500
⊡	38	Hovercat API. 88	G.B.	38.50	45.0	1338	4.030	0.153	26.300
⊡	39	SES Norcat	Norway	85.00	36.0	2650	2.820	0.172	16.420
⊡	40	SAH 2200, Slingsby Aviat.	G.B.	6.80	32.0	140	3.830	0.131	30.200
⊡	41	4000TD, Griffon	G.B.	12.80	38.0	588	3.760	0.243	14.264
⊡	42	SES Jet Rider, Karlskronavarvef	Sweden	88.30	42.0	(90%) 3582	3.270	0.192	17.070
o	43	Westcruiser	Norway	30.50	31.0	1103	2.880	0.231	12.470
o	44	Lady K, Wat.jet.	T-Craft Cape Town	8.30	22.0	368	2.540	0.399	6.360
o	45	Lady K, Wat.jet.	T-Craft Cape Town	8.30	32.0	368	3.700	0.275	13.480
⊡	46	Mark I	Shanghai Zhonghua SES China	95.00	25.0	1968	1.930	0.166	11.630
⊡	47	Mark II	Shanghai Zhonghua SES China	124.00	24.0	2265	1.770	0.151	11.700
⊡	48	Corsair	Blohm+Voss, Germany	160.00	50*	6320	3.530	0.157	22.540
⊡	48a	Corsair, reported max. performance			52*	6320	3.630	0.142	25.630
⊡	49	ThunderChild II, World Record Run	Safehaven Marine Cork/Ireland	25.00	45.0	1024.4	4.341	0.180	24.117
⊡	49a	ThunderChild II top performance	Safehaven Marine Cork/Ireland	25.00	54.0	1358.2	5.209	0.199	26.176
⊡		in Cork-Fastnet Race 09/08/2020	*(Hydrodynamic Performance Rating is 1.683 higher due to foils!)*						
⊡	50	ThunderChild II without foils	Safehaven Marine Cork/Ireland	24.50	45.0	1563.8	4.354	0.280	15.550
⊡	50a	ThunderChild II top performance	Safehaven Marine Cork/Ireland	24.50	50.0	2187.54	4.837	0.308	15.705
⊡	51	Alu RIB 12m	Design FASTcc	8.50	47.5	882.4	5.484	0.215	25.570
⊡	52	Fast PT Boat 17m	Design FASTcc	30.00	45.0	1250	4.211	0.163	25.834
⊡	53	Stealth Yacht 16m	Stealth Yachts Cape Town	22.50	49.0	1226.4	4.910	0.216	22.730
⊡	54	USACE Survey Boat, Catlet	TAI Inc/Aluma Marine, LA - US	38.60	40.0	1354.6	3.589	0.174	20.630
⊡	55	Ultimaratio Yacht	Henze Shipyard, Bremerhafen Germany	27.00	37.0	1000	3.509	0.191	18.370
⊡	56	Rheinjet Ferry	Henze Shipyard, Bremerhafen Germany	27.50	37.5	1000	3.527	0.194	18.180
⊡	57	E-Cat 45m Hysuwac	Halter Marine LA-USA	175.00	46.0	3820	3.200	0.110	29.050
⊡	58	Geo Shipyard ferry 80'	GeoShipyard Louisiana, USA	64.00	34.0	2090	2.805	0.164	17.104
⊡	59	Azimut 7m Tender, Electric	Azimut, Italy	1.58	27.5	50	4.200	0.223	18.830
⊡	60	Alphajet Yacht 80'	Design FASTcc	63.25	55.0	2830	4.545	0.158	28.765
⊡	61	Kawasaki Jetfoil	Japan (cruising speed)	115.00	45.0	4740	3.352	0.181	18.467
⊡	62	Speedy Jetfoil Australia	UK (cruising speed)	119.00	45.0	4740	3.333	0.175	19.000
⊡	63	Candela Hydrofoil - 7m	Sweden	1.30	28.3	50.0	4.820	0.256	18.790
⊡	64	A2V-WIG-20m	France/La Rochele	55.00	60.0	2880	5.054	0.173	29.220
⊡	65	Dolphin V1-10m	Russia/St. Petersburg	3.50	45.0	198.5	8.000	0.251	31.873
⊡	66	Sagaris Hydrofoil 10.5m (streamlined superstructure)	Russia/St. Petersburg	4.17	59.4	382.8	7.690	0.306	25.120
⊡	**67**	**HysuGE-CAT , hydro - and aerodynamics optimized**	**Design FASTcc**	**73.4**	**60.0**	**2332**	**4.830**	**0.109**	**46.000**
⊡	68	Bolide 80'	Victory Design Team, Italy	27.0	73.0	4412	6.927	0.429	16.160

When the power Pb is known or is measured on the ship then the Transport Efficiency (TE) is equal to EPS.