

Total effective power

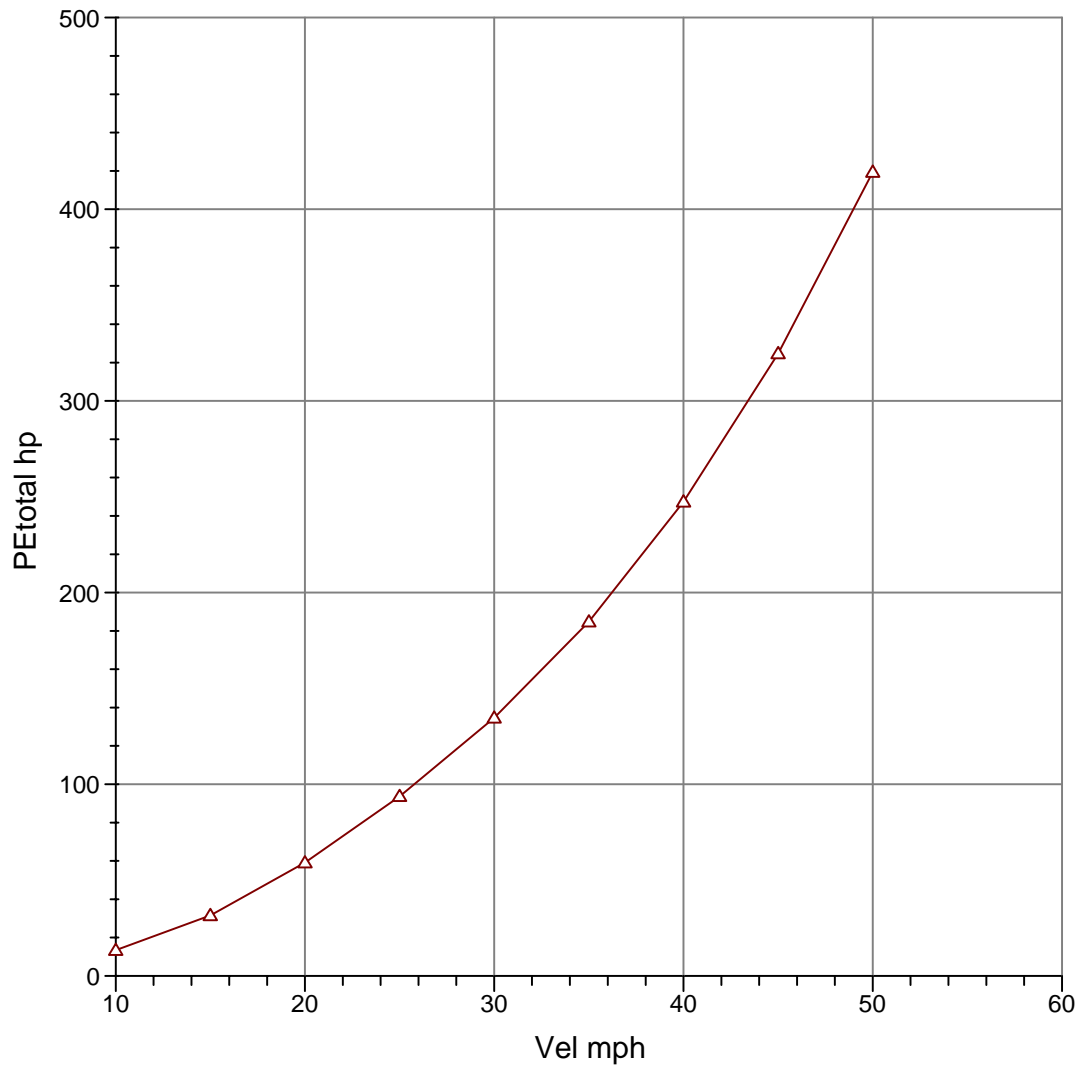
Dave B

Project:

File: 40ft_24degDeadrise_Q_HP.nc4

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This evaluation has been carefully prepared to meet professional standards. Since it is not possible to determine the accuracy of provided data, Dave B assumes no liability nor makes any performance guarantees of any kind.

----- Analysis parameters -----

[X]Bare-hull: Savitsky planing [X]Appendage: Radojicic high-speed
 Technique: Prediction [X]Wind : Taylor head wind
 Cf type : ITTC []Seas :
 Align to : Rbare/W
 File :
 Correlation allow(Ca): 0.00040
 []Roughness:
 []Blount mult....apply:

----- Prediction Results -----

Vel mph	Fv	Fn	Rn	Cf	Trim deg	Lk/Lch	Stab
10.00	1.134	0.437	4.74e07	0.002328	1.741	1.718	STABLE
15.00	1.701	0.656	6.37e07	0.002227	2.164	1.490	STABLE
20.00	2.268	0.874	7.24e07	0.002184	2.723	1.248	STABLE
25.00	2.835	1.093	7.75e07	0.002162	3.108	1.076	STABLE
30.00	3.402	1.311	8.36e07	0.002138	3.111	0.997	STABLE
35.00	3.969	1.530	9.13e07	0.002111	2.915	0.972	STABLE
40.00	4.536	1.748	1.00e08	0.002083	2.660	0.975	STABLE
45.00	5.103	1.967	1.09e08	0.002057	2.412	0.992	STABLE
50.00*	5.670	2.185	1.19e08	0.002032	2.196	1.017	UNSTAB

Vel mph	Mult	Lift lbs	LCElift ft	AvgPr psi	Rbare/W	Rbare lbs	PEbare hp
10.00	1.0000	8985	14.85	0.19	0.0538	484	13
15.00	1.0000	8972	14.80	0.21	0.0831	748	30
20.00	1.0000	8951	14.73	0.24	0.1151	1036	55
25.00	1.0000	8930	14.67	0.28	0.1436	1293	86
30.00	1.0000	8917	14.63	0.32	0.1689	1520	122
35.00	1.0000	8910	14.60	0.34	0.1954	1759	164
40.00	1.0000	8906	14.57	0.35	0.2256	2030	217
45.00	1.0000	8901	14.53	0.36	0.2602	2341	281
50.00	1.0000	8897	14.48	0.37	0.2995	2695	359

Vel mph	Rapp lbs	Rwind lbs	[Reql]	Rseas lbs	Rother lbs	Rtotal lbs	PEtotal hp
10.00	0	18	502	0	0	502	13.4
15.00	0	41	789	0	0	789	31.5
20.00	0	72	1108	0	0	1108	59.1
25.00	0	113	1405	0	0	1405	93.7
30.00	0	162	1682	0	0	1682	134.6
35.00	0	221	1980	0	0	1980	184.8
40.00	0	288	2319	0	0	2319	247.3
45.00	0	365	2706	0	0	2706	324.8
50.00	0	451	3146	0	0	3146	419.4

----- Condition data -----

Water type: Standard Salt
Mass density: 1025.86 kg/m3
Kinematic visc: 1.1883e-06 m2/s

----- Hull data -----

Primary:		Propulsor:	
Length on WL:	35.000 ft	Shaft angle to BL:	0.000 deg
Proj chine length:	35.000 ft	VCE above BL:	0.000 ft
Max chine beam:	8.000 ft	LCE fwd transom:	0.000 ft
Displacement bare:	9000.0 lbs	Flap/wedge:	
Proj bottom area:	180.000 ft2	Number of flaps:	0
Deadrise midchine:	24.000 deg	Flap chord length:	0.000 ft
LCG fwd transom:	15.000 ft	Flap span:	0.000 ft
VCG above BL:	4.000 ft	Flap Deflection:	0.0 deg
		Flap location:	Under hull

Parameters: Savitsky planing
Fn(Bch) 0.6...13 0.9
Fn-high 0.6...13 4.6
Deadrise 0...30 24.0
Clb-low 0...0.5 0.66 Limit

----- Appendages -----

Extended appendages:		Rudders/skegs:	
Front transv area:	40.00 ft2	Number of rudders:	0
Drag coefficient:	0.6500	T/C ratio:	0.0000
		Rudder proj area:	0.00 ft2
Shafts/struts:		Mean rudder chord:	0.000 ft
Number of props:	1	Rudder location:	Free stream
Diameter:	1.000 ft	Skeg proj area:	0.00 ft2
Shaft/boss length:	0.000 ft	Skeg length:	0.000 ft
Shaft/boss diam:	0.000 ft	Appendage parameters:	
Shaft angle to BL:	0.000 deg	VCE above Bl:	0.000 ft
Strut t/c ratio:	0.000	LCE fwd transom:	0.000 ft
Strut proj area:	0.00 ft2	Drag multiplier:	1.000
Mean strut chord:	0.000 ft		
Strut type:	Single strut		
Palm thickness:	0.000 ft		
Trans palm width:	0.000 ft		

Parameters: Radojcic high-speed
Speed(Kts) 0...33 43.4 Limit
No. props 2...2 0 Data

