

HUMPHREE®

Summary of Results:

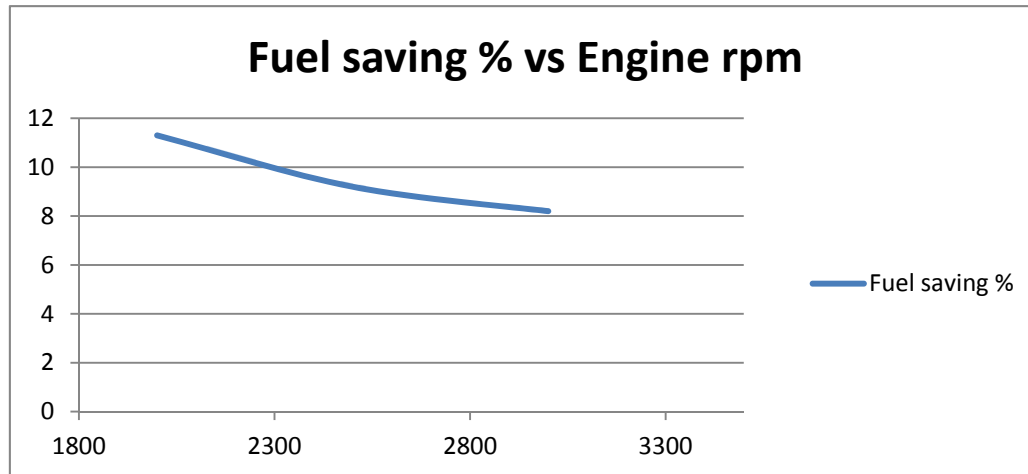
Fuel Savings: 8 - 11% at speeds 10 - 30 knots

Trim adjustments: Approx. 2° for improved visibility (Automatic Adjustmenet with Auto Trim)

Turning improvement: Comfort levels much improved as well as radius of turn (Using Coordinated Turn)

Stabilisation: 40-50% roll motion damping depending weather conditions

Impressions: Improved Comfort & Safety



Date:	18/03/2015	Interceptors:	2 x H750
		LOA:	42 ft
		Chine beam:	3900mm

Boat model:	NW 420
Engines:	2 x VP D6
Propulsion:	IPS-600
Output (hp):	2 x 435

Engine speed	% Interceptor	DATA				IMPROVEMENTS		
		Speed (knots)	Trim	L/hour	L/Nmile	Speed Increase	Fuel saving %	Trim Reduction
Full RPM 3400	0	34,6	3,3	162	4,68			
3000 rpm	0	29,7	4,4	129	4,34			
	5	30,1	4	120	3,99	0,4	8,2	0,4
2500 rpm	0	20,7	7,6	95	4,59			
	50	21,6	5,7	90	4,17	0,9	9,2	1,9
2000 rpm	0	11,5	6,7	69	6,00			
	80	12,4	4,7	66	5,32	0,9	11,3	2

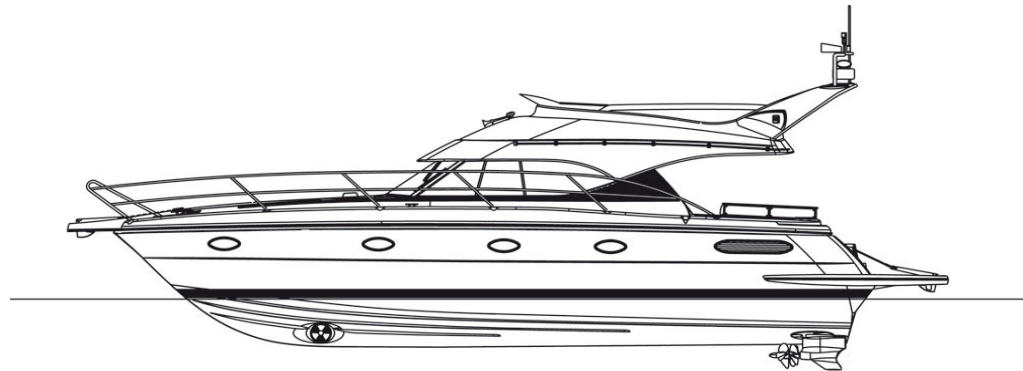
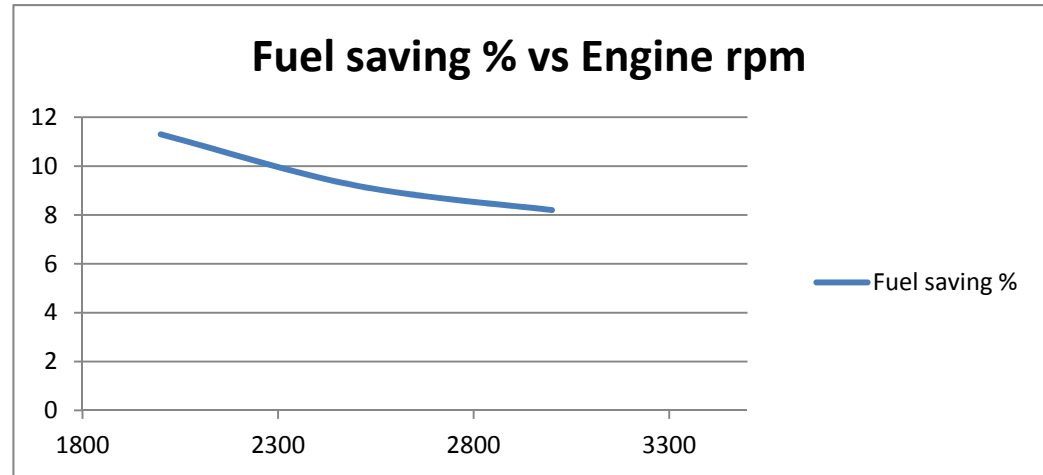
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Test Conditions:

Displacement as tested:		(kg excl. Crew)
Crew:	4	
Fuel:	50	%
Water:	0	%
Salt water Y/N:	Y	Y/N
Wind speed:	1 to 2	m/s
Sea condition:	Very Calm	
Tested by:	P.Landegren	

Settings made for NW420 Fly - IPS

Auto Trim		Coordinated Turn	
Speed	% depl.	Speed	GAIN
4	18	4	0
6	42	6	0
8	66	8	14
10	75	10	50
12	80	12	80
14	75	14	100
16	69	16	100
18	63	18	100
20	57	20	100
22	49	22	100
24	39	24	100
26	27	26	95
28	16	28	82
30	5	30	70
32	0	32	60



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ACTIVE stabilisation measurement:

Tested: April - 2015

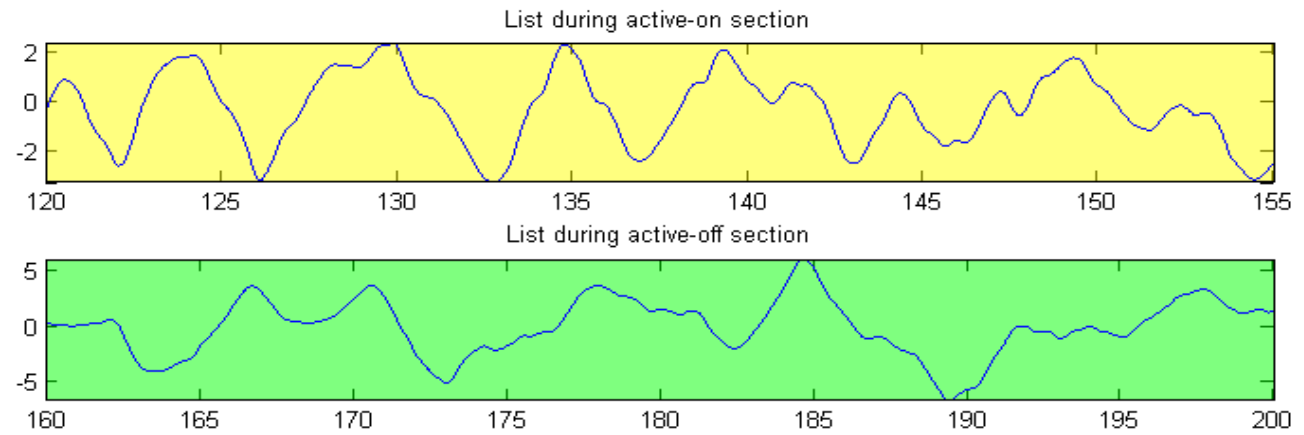
Speed: 22-23 knots

Conditions:

Wind: 4-8m/s

Waves: Medium swell - not so large

Waves from day before



Results: 41.3% damping (RMS)
43% damping (Standard deviation)
Larger damping if larger waves, expected 40-50% damping