

BOAT Name STORMTROOPER Sail Nr SWE 123	GPH 530,9	HULL Length Overall 12,415 m Maximum Beam 3,956 m Displacement 5.100 kg Draft 2,598 m IMS Reg. Division Performance Dynamic Allowance 0,000% Fwd Accommodation Hull Construction Cored Carbon Rudder Yes Crew Arm Extension IMS L 11,265 VCGD -0,258 Sink 21,13 kg/mm RL 11,459 VCGM -0,262 WS 27,92 m²
GENERAL Class FARR 40 OD Designer BRUCE FARR Builder CARROLL MARINE Series 05/1997 Age 05/2000 Age Allowance 0,487% Offset File US30782A.OFF - 26/6/1997 11:00:10 Measurement by MIKAEL LINDQVIST - 02/05/2014		



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SCORING OPTIONS						
	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
Time On Distance	517,7			581,6		
Time On Time	1,1589			1,1606		
Performance Line	PLT	PLD		PLT	PLD	
	1,019	115,6		1,120	284,4	
Triple Number	Low	Medium	High	Low	Medium	High
	1,1273	1,4241	1,6096	0,8677	1,1524	1,3250

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TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	882,1	722,6	654,7	623,8	605,4	598,9	596,0
52°	573,9	482,4	457,4	446,5	439,5	434,3	428,8
60°	537,0	465,2	443,4	431,7	423,6	418,0	409,6
75°	506,2	452,8	426,5	407,4	396,4	389,5	381,0
90°	508,6	447,9	426,5	398,9	377,6	364,4	352,3
110°	510,3	451,2	415,3	389,7	371,4	358,1	326,4
120°	542,7	458,9	421,2	386,4	360,7	346,4	319,0
135°	607,6	490,3	445,7	412,7	378,7	344,1	296,7
150°	725,9	579,4	497,5	450,2	419,5	387,9	326,0
Run VMG	838,2	669,0	574,4	510,8	465,1	433,8	374,7

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Selected Courses							
Windward / Leeward	860,1	695,8	614,6	567,3	535,2	516,3	485,4
Circular Random	723,6	588,0	515,9	473,8	446,8	427,8	400,5
Ocean for PCS	771,8	614,0	526,5	472,5	435,5	407,9	366,4
Non Spinnaker	787,8	633,1	549,4	499,7	468,0	446,2	416,7

Crew Weight

Declared **780 kg**
Default* **785 kg**
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	566,4	1,0593
Non Spin OSN	552,6	1,0858
N/S Perf. Line	77,0	0,885

Velocity Prediction in Knots for True Wind Speeds							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43,1°	42,2°	39,2°	37,6°	36,3°	36,2°	36,5°
Beat VMG	4,08	4,98	5,50	5,77	5,95	6,01	6,04
52°	6,27	7,46	7,87	8,06	8,19	8,29	8,40
60°	6,70	7,74	8,12	8,34	8,50	8,61	8,79
75°	7,11	7,95	8,44	8,84	9,08	9,24	9,45
90°	7,08	8,04	8,44	9,02	9,53	9,88	10,22
110°	7,05	7,98	8,67	9,24	9,69	10,05	11,03
120°	6,63	7,84	8,55	9,32	9,98	10,39	11,29
135°	5,92	7,34	8,08	8,72	9,51	10,46	12,13
150°	4,96	6,21	7,24	8,00	8,58	9,28	11,04
Run VMG	4,29	5,38	6,27	7,05	7,74	8,30	9,61
Gybe Angles	141,8°	142,1°	148,5°	157,8°	174,3°	175,6°	173,2°

Sails Limitations

Headsails	Spinnakers
7	4

Class Division Length
CDL = **11,363**

Storm Sails Areas


Heavy Weather Jib **35,32**
Storm Jib (JL=10,51) **13,08**
Storm Triesail **17,23**

Owner

BOAT	
Name STORMTROOPER	Sail Nr SWE 123
File (0)	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date 02/05/2014				SG 1,0050	
FFM 1,329	FF 1,337	SFFP 0,152			
FAM 1,016	FA 1,022	SAFP 11,954			
W1 91,700	PD1 560,5	WD 12,815			
W2 91,700	PD2 560,5	GSA 1,0			
W3 91,700	PD3 555,3	RSA 1,0			
W4 91,700	PD4 557,7	PLM 9000,0			
LCF from stem on CL / on sheer				6,836 / 7,090	
Maximum beam station from stem				8,199	
RM Measured / Default				165,7 / 167,1	
Limit of positive stability / Stab.Index				127,7° / 124,2	
Freeboard at mast at 4,719				1,196	


RIG					
Forestay Tension Aft			Spreaders 2		
Inner Stay None Fitted			Runners 0		
Carbon Mast Yes			Jumper Struts None		
Taper Hollows			Jib Furler		
Fiber Rigging			Main Furler		
Lenticular Rigging			Without Backstay		
Articulated Bowsprit No					
P 16,690	E 5,900	MDT1 0,122	MW 0,244		
IG 16,138	J 4,719	MDL1 0,244	GO 0,255		
ISP 18,263	SFJ 0,000	MDT2 0,092	BD 0,225		
BAS 1,733	SPL 5,215	MDL2 0,107	MWT		
FSP 0,066	TPS	TL 1,740	MCG		



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2015 Measurements Datasheet

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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0,407	
Type Folding 2 blades	PBW	
Twin Screw	PIPA 0,0035	
ST1 0,041	ST3 0,180	ST5 0,268
ST2 0,180	ST4 0,111	EDL 0,702

COMMENTS	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	HB	MGT	MGU	MGM	MGL	Area	Area (r)	Formula	
	0,178	1,47	2,59	4,20	5,20	62,89	64,77	P/8 · (E + 2·MGL + 2·MGM + 1.5·MGU + MGT + 0.5·HB)	
Symmetric	SL	SMG	SF				159,47	SL · (SF + 4·SMG) / 6	
Asymmetric	SLU	SLE	ASL	AMG	ASF	127,80	ASL · (ASF + 4·AMG) / 6		

HEADSAILS												
Area = 0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)												
JH	JGT	JGU	JGM	JGL	LPG	JL	Area	Btn	Fly	Meas.Date	Material	Comment
0,09	0,70	1,33	2,57	3,74	4,91	16,45	41,56				Unknow	
0,09	0,70	1,34	2,54	3,72	4,88	16,44	41,29			20/04/2014	Unknow	3Di 2014
0,09	0,62	1,21	2,38	3,60	4,88	16,24	39,27	Y			Unknow	

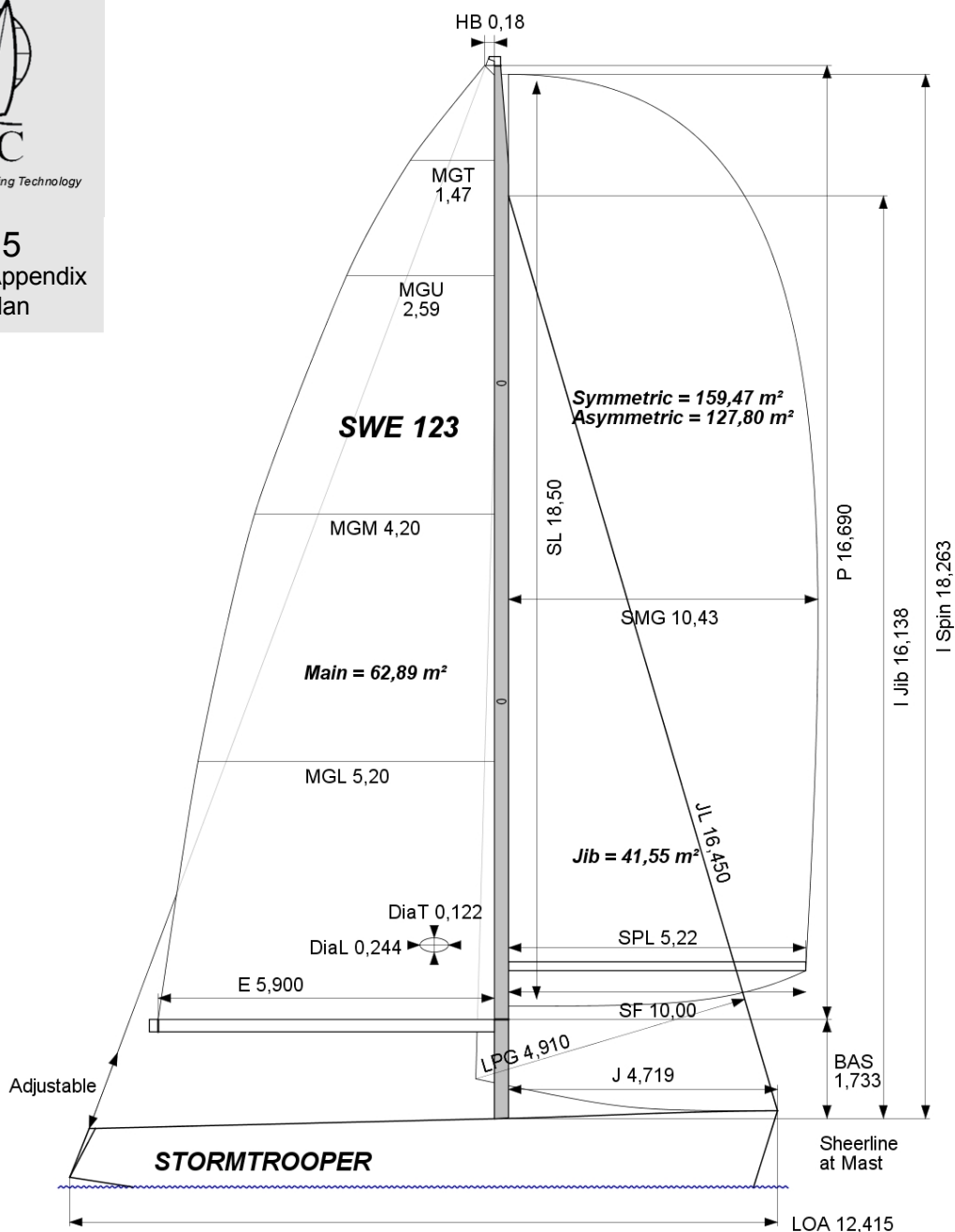
MEASUREMENT INVENTORY				
Measurer MIKAEL LINDQVIST 1129				
Date 02/05/2014				
Comment				
Id	Item	Weight	Distance	VCG Description
A+	Anchor	17,0	7,80	-0,20 BRUCE + ROPE
T+	Tools	7,0	7,80	TOOLBOX
Id	Item	Maker	Model	
E1	Engine	YANMAR	3GM -21 kW	
Id	Item	Weight	Description	
D+	Deck-Gear	10,0		
	Fwd-Items			

MEASUREMENT INVENTORY									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
F1	Tank	FUEL		ALU	75,0	8,70	0,00	0-0	
W1	Tank	WATER		INFLATIBLE	100,0	6,30	-0,20	0-0	
Id	Item	Weight	Distance	VCG Description					
B1	Ballast	10,2	9,00	-0,10 LEAD (18X10X5 CM)					
B1	Battery	25,0	7,00	-0,20 75 Ah					
B2	Battery	25,0	7,00	-0,20 75 Ah					
M1	Misc	9,0	11,10	0,00 AUTOPILOT					



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Sail Plan



SAILS INVENTORY

MANSAIL																
Id	HB	MGT	MGU	MGM	MGL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
M1	0,178	1,47	2,59	4,20	5,20	62,89	957	20/04/2014	NORTH	Unknown	3Di - 2014					
HEADSAILS																
Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
J1	0,09	0,70	1,33	2,57	3,74	4,91	16,45	104%	41,56			957	20/04/2014	NORTH	Unknown	3Di 2014
j2 3Di	0,09	0,70	1,34	2,54	3,72	4,88	16,44	103%	41,29						Unknown	3Di 2014
jib1	0,09	0,62	1,21	2,38	3,60	4,88	16,24	103%	39,27	Y					Unknown	
SYMMETRIC SPINNAKERS																
Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment							
s2	18,50	10,43	10,00	159,47	957	20/04/2014	NORTH	Nylon	New 2014							
s1,5	18,38	10,05	10,00	153,78				Nylon								
SWE S1	18,50	9,75	10,03	151,18				Unknown								
ASYMMETRIC SPINNAKERS																
Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
A3	18,50	17,00	17,75	8,55	9,00	127,80	asym	957	20/04/2014	NORTH	Nylon	New 2014				