

BOAT	
Name AMSERV TOYOTA ST	Sail Nr EST 379
File Est0379	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 10/06/2018		SG 1.0000	
FFM 1.338	FF 1.346	SFFP 0.367	
FAM 1.060	FA 1.067	SAFP 10.161	
W1 90.5	PD1 618.5	WD 11.520	
W2 90.5	PD2 618.6	GSA 1.0	
W3 90.5	PD3 618.8	RSA 1.0	
W4 90.5	PD4 621.7	PLM 9000.0	
LCF from stem on CL / on sheer		5.880 / 6.098	
Maximum beam station from stem		6.980	
RM Measured		132.6kg·m	
RM Default		139.4kg·m	
Limit of positive stability / Stab.Index		117.0° / 118.5	
Freeboard at mast at 3.940		1.204	



2018
Measurements
Datasheet

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast Yes	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 14.150	E 4.960	MDT1 0.149	MW 0.215
IG 15.037	J 3.940	MDL1 0.215	GO 0.240
ISP 15.090	SFJ 0.000	MDT2 0.120	BD 0.250
BAS 1.585	SPL 4.320	MDL2 0.198	MWT 151.50
FSP 0.068	TPS	TL 0.910	MCG 5.650

Certificate	
Number EST379	
ORC Ref EST00000195	
Issued On 6/12/2018	
VPP Ver. 2018 1.00	
Valid until 12/31/2018	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.410		
Type Folding 2 blades	PBW 0.130		
Twin Screw No	PIPA 0.0027		
ST1 0.042	ST3 0.180	ST5 0.280	
ST2 0.180	ST4 0.090	EDL 2.480	

COMMENTS	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS INVENTORY																
MAINSAIL (2)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
6a	0.420	1.15	1.89	3.17	4.16	42.12	EST 7	09/06/2018	OneSails	Unknown	P14,15;E4,96					
5	0.215	1.09	1.91	3.24	4.13	42.03	SWE957/ B.Ö	06/01/2012	NorthSails	Unknown	P14,28;E4,97					
HEADSAILS (5)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
13a	0.12	0.71	1.30	2.28	3.17	4.07	14.76	103%	32.38			EST 7	09/06/2018	NS	Unknown	Jib 3.0 Light 2018
11a	0.07	0.59	1.12	2.13	3.11	4.08	14.63	104%	30.75						Unknown	Jib 3.1 2013
7	0.10	0.61	1.15	2.16	3.15	4.10	14.10	104%	30.03						Unknown	Jib 3.2 2015 heavy
6	0.13	0.59	1.09	2.07	3.10	4.18	13.50	106%	28.36			EST 1	05/05/2014		Dacron	Jib 3.3
10	0.06	0.48	0.86	1.49	2.05	2.73	13.03	69%	18.80			SWE 957			Unknown	Staysail
SYMMETRIC SPINNAKERS (3)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
10	15.29	15.29	15.29	8.42	7.85	105.83	SLO 03	15/07/2017	OneSails	Unknown	S2 Run					
11	15.30	15.30	15.30	8.37	7.90	105.52				Unknown	lite katarina vana					
12	15.20	15.20	15.20	7.20	8.00	93.23				Unknown	S3 Toyota					
ASYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				

MEASUREMENT INVENTORY				
Measurer Karl-Hannes Tagu EST 7				
Date 10/06/2017				
Comment Tallinn - Pirita				
Id	Item	Weight	Distance	VCG Description
1	Engine			YANMAR 3YM30
Id	Item	Weight	Distance	VCG Description

MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condn Description
1	Tank	Water	plastic	160.0	4.85		0-0 Water tank, strb.
3	Tank	Fuel	steel	60.0	8.70		5-0 Fuel tank, center
Id	Item	Weight	Distance	VCG Description			
1	Battery	3.0	7.10	30 Ah			
2	Battery	17.0	7.10	90 Ah			
1	Misc		10.00	Heater - Eberspächer Marine D4			
2	Misc		10.00	Autopilot - Raymarine			



World Leader in Rating Technology

2018

ORC Club Certificate Appendix

BOAT			
Name	AMSERV TOYOTA ST	Certificate Number	EST379
Sail Nr	EST 379	Issued On	6/12/2018

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1025.1	853.4	754.7	714.8	702.8	699.8	689.2
52°	680.2	573.1	523.1	505.1	499.3	496.9	490.9
60°	647.4	550.4	510.4	493.5	486.4	483.2	478.3
75°	622.8	535.5	501.4	482.7	469.4	461.5	456.1
90°	628.2	527.0	492.9	479.9	462.4	446.6	427.0
110°	619.2	519.2	483.1	459.1	442.5	430.9	411.8
120°	634.8	528.6	488.0	461.2	436.0	415.5	393.2
135°	697.3	569.1	507.5	478.5	453.1	427.9	381.2
150°	824.6	660.2	559.9	506.3	479.4	455.8	410.5
Run VMG	952.2	762.3	645.8	572.6	522.4	490.6	445.0
Selected Courses							
Windward / Leeward	988.6	807.9	700.3	643.7	612.6	595.2	567.1
Circular Random	842.6	682.8	598.4	550.4	521.4	502.6	477.3
Coastal / Long Distance	985.0	759.6	634.6	567.5	532.1	504.1	457.7
Non Spinnaker	905.7	727.6	631.6	576.0	542.3	520.4	492.6

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	42.1°	40.8°	40.0°	38.6°	38.2°	38.7°	38.8°
Beat VMG	3.51	4.22	4.77	5.04	5.12	5.14	5.22
52°	5.29	6.28	6.88	7.13	7.21	7.24	7.33
60°	5.56	6.54	7.05	7.30	7.40	7.45	7.53
75°	5.78	6.72	7.18	7.46	7.67	7.80	7.89
90°	5.73	6.83	7.30	7.50	7.79	8.06	8.43
110°	5.81	6.93	7.45	7.84	8.13	8.36	8.74
120°	5.67	6.81	7.38	7.81	8.26	8.67	9.16
135°	5.16	6.33	7.09	7.52	7.95	8.41	9.45
150°	4.37	5.45	6.43	7.11	7.51	7.90	8.77
Run VMG	3.78	4.72	5.57	6.29	6.89	7.34	8.09
Gybe Angles	145.3°	149.3°	151.0°	158.5°	180.0°	180.0°	180.0°