BOAT

Name **Cheyenne**
Sail Nr **SWE 622**

GPH

598.4

GENERAL

Class	**Farr 30**
Designer	**Farr**
Builder	**Ovington**
Series	**01/1996**
Age	**06/1996**
Age Allow ance	**0.487%**
Offset File	**FARR30.OD.OFF - 24/05/2009 23:54:20**
Measurement by	**- 22/06/2016**

HULL

Length Overall	**9.435m**
Maximum Beam	**3.038m**
Displacement	**2,384kg**
Draft	**2.147m**
IMS Reg. Division	**Performance**
Dynamic Allow ance	**0.000%**
Fw d Accommodation	**No**
Hull Construction	**Light**
Carbon Rudder	**Yes**
Crew Arm Extension	

IMSL	**8.934m**	VCGD	**-0.298m**	Sink	**12.00kg/mm**
RL	**9.228m**	VCGM	**-0.258m**	WS	**16.14m²**
LSM0	**8.722m**	Displacement/Length ratio			**3.5930**

SCORING OPTIONS

	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	**583.3**			**652.1**		
Time on Time	**1.0286**			**1.0351**		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	**672.1**	**536.0**	**473.0**	**864.5**	**655.0**	**575.4**
Time on Time	**1.0043**	**1.2594**	**1.4272**	**0.7808**	**1.0306**	**1.1730**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	**949.1**	**786.4**	**717.7**	**695.1**	**685.3**	**673.9**	**668.5**
52°	**627.4**	**543.0**	**516.8**	**506.0**	**500.1**	**497.0**	**486.1**
60°	**594.0**	**529.4**	**504.8**	**490.5**	**482.3**	**477.4**	**463.8**
75°	**571.5**	**519.4**	**492.3**	**468.8**	**452.6**	**443.7**	**434.3**
90°	**579.6**	**518.2**	**487.8**	**462.4**	**436.3**	**416.4**	**396.3**
110°	**596.8**	**516.8**	**478.6**	**442.8**	**416.1**	**397.0**	**367.9**
120°	**618.8**	**525.2**	**485.9**	**446.1**	**408.8**	**378.3**	**341.6**
135°	**694.1**	**562.2**	**510.8**	**474.9**	**436.2**	**397.1**	**320.5**
150°	**827.9**	**663.9**	**560.9**	**511.1**	**477.8**	**442.6**	**370.5**
Run VMG	**955.9**	**766.6**	**646.5**	**574.5**	**524.7**	**492.2**	**427.8**
Selected Courses							
Windward / Leeward	**952.5**	**776.5**	**682.1**	**634.8**	**605.0**	**583.0**	**548.1**
Circular Random	**811.6**	**661.7**	**582.0**	**535.2**	**504.7**	**482.5**	**449.1**
Coastal / Long Distance	**952.9**	**733.1**	**620.7**	**558.1**	**519.1**	**484.0**	**427.3**
Non Spinnaker	**863.8**	**698.3**	**609.6**	**557.4**	**523.9**	**500.2**	**465.5**

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	**41.8°**	**40.3°**	**37.3°**	**36.4°**	**36.0°**	**35.2°**	**35.5°**
Beat VMG	**3.79**	**4.58**	**5.02**	**5.18**	**5.25**	**5.34**	**5.39**
52°	**5.74**	**6.63**	**6.97**	**7.11**	**7.20**	**7.24**	**7.41**
60°	**6.06**	**6.80**	**7.13**	**7.34**	**7.46**	**7.54**	**7.76**
75°	**6.30**	**6.93**	**7.31**	**7.68**	**7.95**	**8.11**	**8.29**
90°	**6.21**	**6.95**	**7.38**	**7.79**	**8.25**	**8.65**	**9.08**
110°	**6.03**	**6.97**	**7.52**	**8.13**	**8.65**	**9.07**	**9.79**
120°	**5.82**	**6.85**	**7.41**	**8.07**	**8.81**	**9.52**	**10.54**
135°	**5.19**	**6.40**	**7.05**	**7.58**	**8.25**	**9.07**	**11.23**
150°	**4.35**	**5.42**	**6.42**	**7.04**	**7.53**	**8.13**	**9.72**
Run VMG	**3.77**	**4.70**	**5.57**	**6.27**	**6.86**	**7.31**	**8.41**
Gybe Angles	**140.8°**	**146.7°**	**151.2°**	**160.5°**	**180.0°**	**180.0°**	**180.0°**

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2019
ORC International Certificate

Rating Office

Offshore Racing Congress

Certificate

Number **622F30**
ORC Ref **SWE20190337**
Issued On **30/07/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight

Default	566kg
Maximum	**610kg**
Minimum*	**458kg**

**when applied by the NoR and SI*

Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	**618.0**	**0.9709**
Double H.OSN	**606.4**	**0.9895**
Non Spin GPH	**627.9**	**0.9556**
Non Spin OSN	**611.1**	**0.9818**

Sails Limitations

Headsails	Spinnakers
5	**3**

Class Division Length

CDL = **9.081**

Storm Sails Areas

Heavy Weather Jib	**18.31**
Storm Jib (JL=7.57)	**6.78**
Storm Trysail	**9.61**

Owner

BOAT

Name	**Cheyenne**	Sail Nr	**SWE 622**
File	**SWE622 Farr30**	Data in	**meters/kilograms**

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	**12.365**	E	**4.440**	MDT1	**0.083**	MW	**0.143**
IG	**11.636**	J	**3.315**	MDL1	**0.143**	GO	**0.145**
ISP	**11.681**	SFJ	**0.111**	MDT2	**0.063**	BD	**0.176**
BAS	**1.256**	SPL	**3.400**	MDL2	**0.105**	MWT	**68.80**
FSP	**0.056**	TPS		TL	**1.925**	MCG	**4.755**

INCLINING TEST AND FREEBOARDS

Inclining Test **Current Inclining**

Flotation date **27/05/2019** SG **1.0000**

FFM	**1.011**	FF	**1.018**	SFFP	**0.222**
FAM	**0.761**	FA	**0.765**	SAFP	**8.685**
W1	**41.1**	PD1	**649.7**	WD	**10.003**
W2	**41.1**	PD2	**647.3**	GSA	**1.0**
W3	**41.1**	PD3	**654.5**	RSA	**1.0**
W4	**41.1**	PD4	**648.9**	PLM	**9000.0**

LCF from stem on CL / on sheer	**5.277 / 5.473**
Maximum beam station from stem	**5.825**
RM Measured	**49.8kg·m**
RM Default	**54.3kg·m**
Limit of positive stability / Stab.Index	**127.2° / 121.2**
Freeboard at mast at 3.426	**0.926**

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MIZZEN RIG AND SAILS

N/A

PROPELLER

Installation	**Strut**	PRD	**0.355**
Type	**Folding 2 blades**	PBW	**0.094**
Twin Screw	**No**	PIPA	**0.0032**

ST1	**0.050**	ST3	**0.180**	ST5	**0.225**
ST2	**0.180**	ST4	**0.112**	EDL	**1.255**

Certificate

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Valid until **31/12/2019**

COMMENTS

fd #6278

MOVABLE BALLAST

N/A

CENTERBOARD

N/A

SAILS (Maximum Areas)

Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula
	0.180	1.10	1.96	3.16	3.95	35.22	36.32	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	**SLU**	**SLE**	**SL**	**SHW**	**SFL**			
	11.90	11.90	11.90	6.55	6.05	63.96		SL · (SFL + 4·SHW) / 6
Asymmetric	**SLU**	**SLE**	**SL**	**SHW**	**SFL**			
	11.92	11.54	11.73	5.31	6.98	55.17		AS · (SFL + 4·SHW) / 6

HEADSAILS

Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)

HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.06	0.51	0.96	1.79	2.61	3.45	11.74	20.82	Y		14/06/2018	Carbon	OSE2546-001
0.06	0.50	0.95	1.78	2.59	3.44	11.72	20.66	Y		11/03/2016	Carbon	OUS108854-1
0.07	0.50	0.95	1.77	2.59	3.43	11.67	20.53	Y		21/06/2018	Carbon	OSE1030-002
0.06			1.54		3.06	10.60	16.46			07/03/2016	Unknow	
0.08	0.36	0.67	1.27	1.84	2.46	10.14	12.76		Y	05/07/2019	Polyest	OSE3090-1

MEASUREMENT INVENTORY

Measurer **1129**
Date **22/06/2016**
Comment

Id	*Item*	*Weight*	*Distance*	*VCG*	*Description*

Id	*Item*	*Maker*	*Model*
e	Engine	Yanmar	1GM10, 10hp

Id	*Item*	*Weight*	*Description*

MEASUREMENT INVENTORY

Id	*Item*	*Tank Use*	*Tank Type*	*Capcty*	*Dist.*	*VCG*	*Condtn*	*Description*
w1	Tank	Water	Inflatible	55.0	4.40	0.00	~~0.0~~	
f1	Tank	Fuel	Plastic	25.0	6.60	0.20	~~0.0~~	

Id	*Item*	*Weight*	*Distance*	*VCG*	*Description*
b3	Ballast	63.2	5.10		lead, 32,1 + 31,1
b2	Ballast	64.4	4.60		lead, 22,3 + 21,0 + 21,1 kg
b1	Ballast	24.6	4.30		lead
b1	Battery		6.50	0.20	80 Ah
b2	Battery		6.20	0.20	35 Ah

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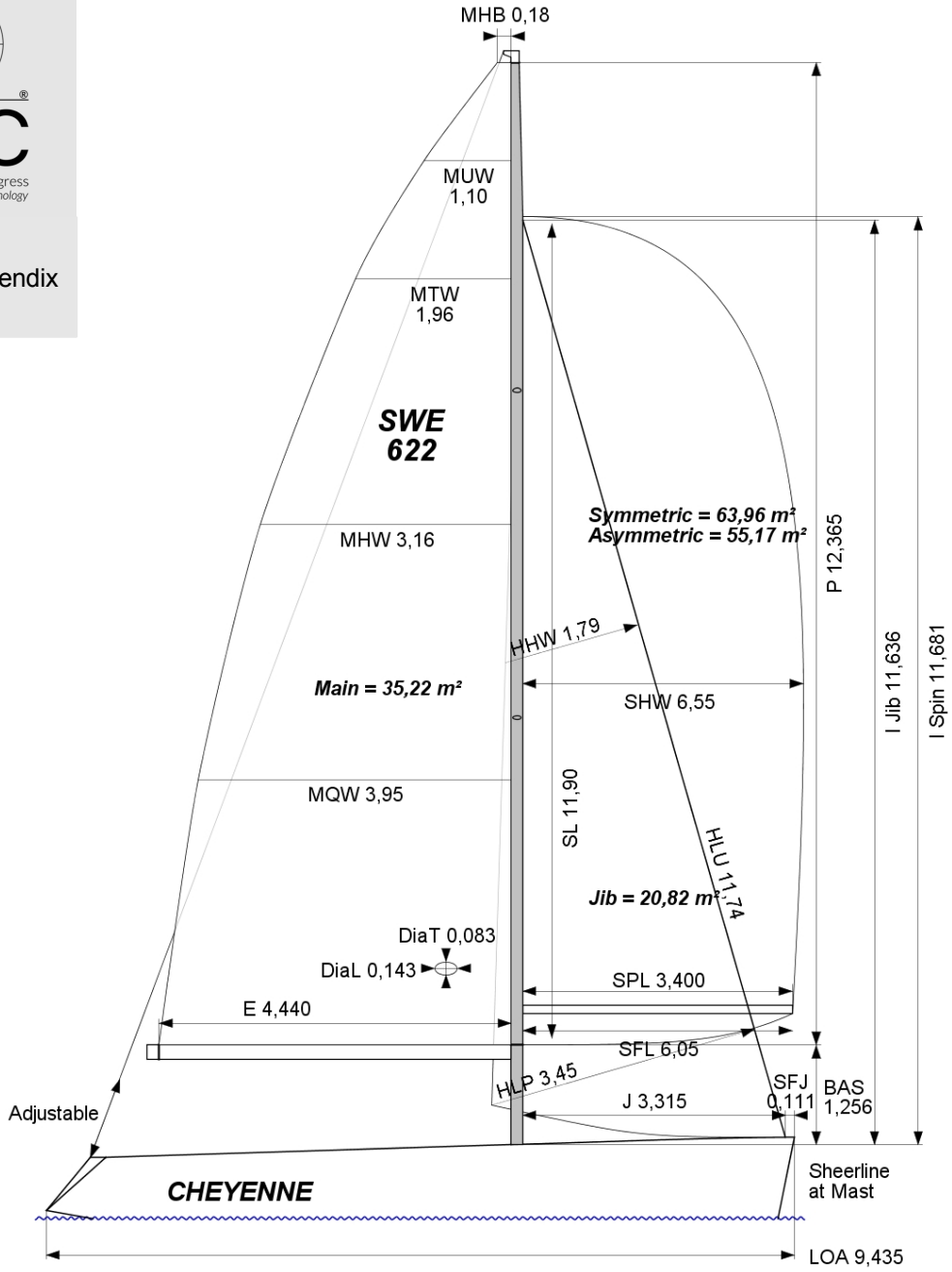
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
MNi-3 -19	0.18	1.10	1.96	3.16	3.95	35.23		20/02/2019	North	Carbon	OSE2894-1

HEADSAILS (5)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
Jib Mi5 -	0.06	0.51	0.96	1.79	2.61	3.45	11.74	104%	20.82	Y			14/06/2018	North Sails	Carbon	OSE2546-001
Jib Li-2 -	0.06	0.50	0.95	1.78	2.59	3.44	11.72	104%	20.66	Y			11/03/2016	North Sails	Carbon	OUS108854-1
Jib Li-3	0.07	0.50	0.95	1.77	2.59	3.43	11.67	103%	20.53	Y			21/06/2018	North Sails	Carbon	OSE1030-002
HW Jib	0.06			1.54		3.06	10.60	92%	16.46				07/03/2016	North Sails	Unknow	
FR Spi	0.08	0.36	0.67	1.27	1.84	2.46	10.14	74%	12.76		Y		05/07/2019	North Sails	Polyest	OSE3090-1

SYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S2 Fr 2019	11.90	11.90	11.90	6.55	6.05	63.97		14/05/2019	North Sails	Nylon	
S4 FR röd	11.92	11.92	11.92	6.29	5.94	61.79		06/12/2010	North Sails	Unknown	

ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
a5	11.92	11.54	11.73	5.31	6.98	55.18	asym		26/06/2019	North Sails	Polyester	OSE3066-1