

BOAT
Name CHEETAH Sail Nr USA 50473

GPH
570.3

HULL
Length Overall 10.910m
Maximum Beam 3.588m
Displacement 3,882kg
Draft 2.254m
IMS Reg. Division Performance
Dynamic Allowance 0.000%
Fwd Accommodation No
Hull Construction Cored
Carbon Rudder No
Crew Arm Extension
IMSL 9.886m VCGD -0.227m Sink 17.10kg/mm
RL 10.042m VCGM -0.242m WS 22.28m²
LSM0 9.592m Displacement/Length ratio 4.3987



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GENERAL
Class MUMM 36
Designer FARR
Builder CARROLL
Series 01/1993
Age 12/1994
Age Allowance 0.487%
Offset File MUMM36.OFF - 30/06/1994 07:56:34
Measurement by - 26/04/2017

Rating Office

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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	556.3			625.1		
Time on Time	1.0786			1.0798		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	635.1	511.2	458.7	813.8	626.0	556.4
Time on Time	1.0628	1.3204	1.4716	0.8294	1.0783	1.2131



TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	914.9	757.4	690.3	666.3	654.8	651.0	643.7
52°	605.8	519.4	492.6	482.6	477.0	473.7	469.2
60°	575.5	505.8	481.6	469.4	462.1	457.8	453.6
75°	553.6	497.1	471.3	451.4	437.6	429.7	422.3
90°	559.2	496.2	470.5	446.3	424.4	407.5	390.0
110°	558.2	485.6	452.4	432.5	416.7	400.7	372.1
120°	571.0	489.8	453.0	420.0	397.9	381.6	350.7
135°	641.2	518.6	473.4	438.1	402.7	367.6	311.4
150°	760.9	610.1	520.7	477.6	451.0	420.7	349.4
Run VMG	878.6	704.4	601.2	550.8	520.7	485.7	403.4

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Number **US6204**
ORC Ref **USAX02318N4**
Issued On **30/03/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Selected Courses							
Windward / Leeward	896.8	730.9	645.8	608.6	587.8	568.4	523.6
Circular Random	768.9	628.0	554.5	512.5	485.9	466.6	435.9
Coastal / Long Distance	895.0	689.8	587.8	532.2	500.0	470.9	418.7
Non Spinnaker	837.8	676.8	590.4	539.9	508.0	486.2	456.1

Crew Weight

Default **649kg**
Maximum **600kg**
Minimum* **450kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	608.3	0.9864
Non Spin OSN	593.8	1.0105

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	42.0°	40.5°	37.9°	36.9°	36.3°	36.3°	36.3°
Beat VMG	3.93	4.75	5.21	5.40	5.50	5.53	5.59
52°	5.94	6.93	7.31	7.46	7.55	7.60	7.67
60°	6.26	7.12	7.48	7.67	7.79	7.86	7.94
75°	6.50	7.24	7.64	7.98	8.23	8.38	8.52
90°	6.44	7.26	7.65	8.07	8.48	8.84	9.23
110°	6.45	7.41	7.96	8.32	8.64	8.98	9.68
120°	6.30	7.35	7.95	8.57	9.05	9.43	10.27
135°	5.61	6.94	7.60	8.22	8.94	9.79	11.56
150°	4.73	5.90	6.91	7.54	7.98	8.56	10.30
Run VMG	4.10	5.11	5.99	6.54	6.91	7.41	8.92
Gybe Angles	143.5°	146.1°	149.5°	151.6°	148.3°	145.8°	142.1°

Sails Limitations

Headsails	Spinnakers
6	4

Class Division Length

CDL = **9.965**

Storm Sails Areas

Heavy Weather Jib **24.26**
Storm Jib (JL=8.72) **8.99**
Storm Trysail **12.21**

Owner

BOAT		
Name CHEETAH	Sail Nr USA 50473	
File US6204	Data in meters/kilograms	

RIG				
Forestay Tension Aft		Spreaders 2		
Inner Stay None Fitted		Runners 2		
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 13.864	E 5.029	MDT1 0.122	MW 0.165	
IG 13.331	J 3.800	MDL1 0.168	GO 0.186	
ISP 15.726	SFJ 0.185	MDT2 0.111	BD 0.150	
BAS 1.967	SPL 0.000	MDL2 0.130	MWT 117.00	
FSP 0.064	TPS 5.773	TL 1.400	MCG 4.835	

INCLINING TEST AND FREEBOARDS				
Inclining Test Current Inclining				
Flotation date 26/04/2017			SG 1.0080	
FFM 1.153	FF 1.165	SFFP 0.414		
FAM 0.914	FA 0.914	SAFP 10.334		
W1 59.5	PD1 516.2	WD 12.640		
W2 59.5	PD2 515.1	GSA 1.0		
W3 59.5	PD3 516.6	RSA 1.0		
W4 59.5	PD4 519.9	PLM 9000.0		
LCF from stem on CL / on sheer			6.114 / 6.349	
Maximum beam station from stem			6.703	
RM Measured			114.6kg-m	
RM Default			106.9kg-m	
Limit of positive stability / Stab.Index			124.6° / 119.9	
Freeboard at mast at 3.985			1.014	



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MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.438	
Type Folding 2 blades	PBW 0.118	
Twin Screw No	PIPA 0.0034	
ST1 0.042	ST3 0.182	ST5 0.286
ST2 0.182	ST4 0.110	EDL 0.840

Certificate	
Number US6204	
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COMMENTS

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.180	1.02	1.87	3.19	4.14	40.91	41.73	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric on centerline	SLU	SLE	SL	SHW	SFL	Area	Formula		
	17.30	15.73	16.52	9.88	10.10	136.58	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
0.08	0.73	1.40	2.80	4.25	5.83	13.36	38.17					

MEASUREMENT INVENTORY				
Measurer	Date	Comment		
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
a	Ancher	0.0	0.00	
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Description</i>	

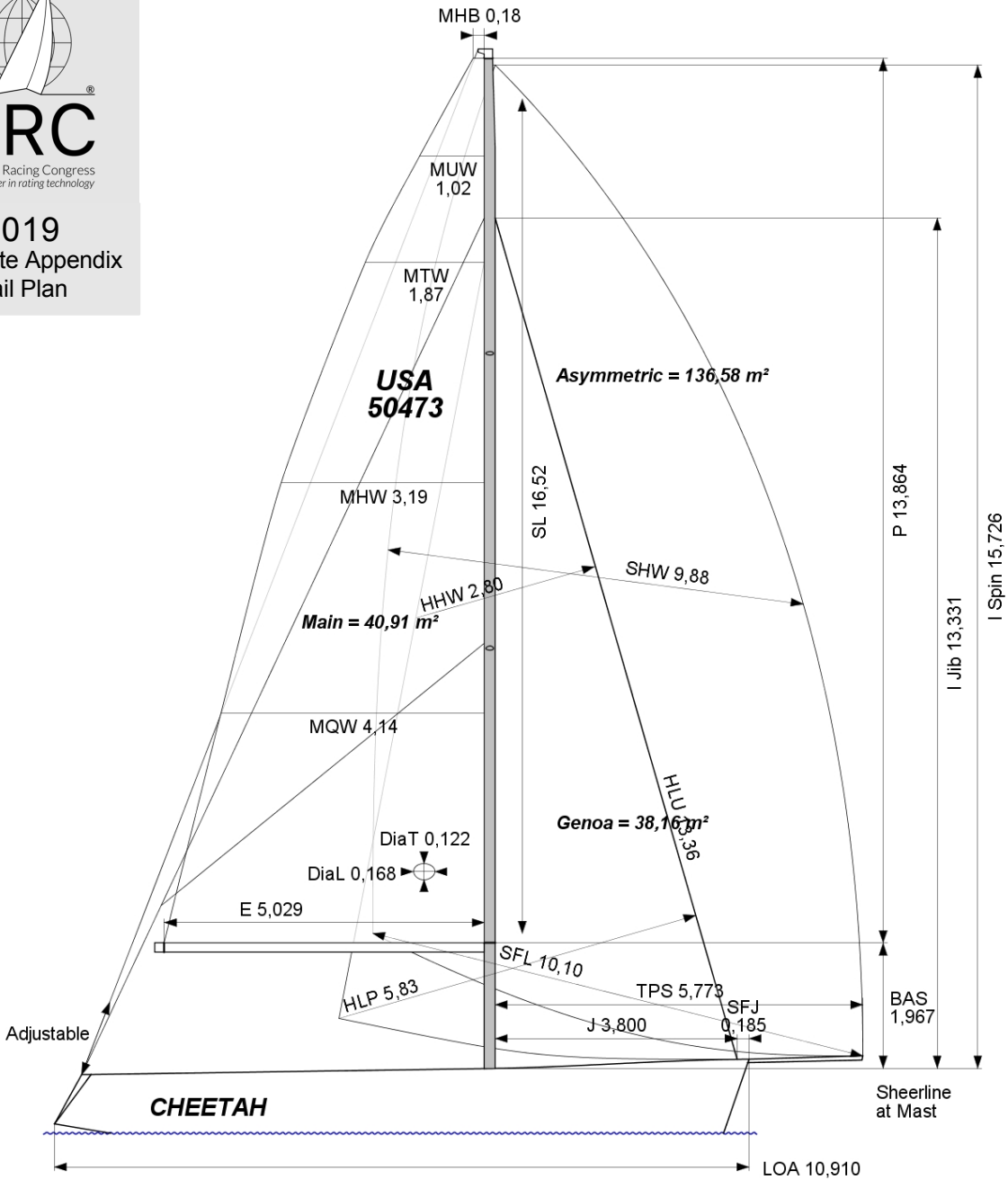
MEASUREMENT INVENTORY									
<i>Id</i>	<i>Item</i>	<i>Tank Use</i>	<i>Tank Type</i>	<i>Capcty</i>	<i>Dist.</i>	<i>VCG</i>	<i>Condtn</i>	<i>Description</i>	
	Tank				0.00	-0.10	14.9		
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>					



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Sail Plan



SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
1793473	0.18	1.02	1.87	3.19	4.14	40.91			Steven		3Di Main 2018					
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1461125	0.08	0.73	1.40	2.80	4.25	5.83	13.36	153%	38.17						NORTH	
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
1793482	17.30	15.73	16.52	9.88	10.10	136.58	asym			Steven		A-2 2018				