BOAT

Name **RAVEN a**
Sail Nr **PER 43833**

GPH

630,9

GENERAL

Class	**Tripp 33**
Designer	**Tripp**
Builder	**Carrol Marine**
Series	**06/1992**
Age	**06/1992**
Age Allow ance	**0,487%**
Offset File	**OPTION96.OFF - 23/07/2014 05:06:08**
Measurement by	**- 16/06/2017**

HULL

Length Overall	**10,025m**
Maximum Beam	**3,140m**
Displacement	**3.877kg**
Draft	**2,060m**
IMS Reg. Division	**Cruiser/Racer**
Dynamic Allow ance	**0,130%**
Fw d Accommodation	**No**
Hull Construction	**Cored**
Carbon Rudder	**No**
Crew Arm Extension	

IMSL	**9,429m**	VCGD	**0,130m**	Sink	**16,41kg/mm**
RL	**8,753m**	VCGM	**0,103m**	WS	**21,11m²**
LSM0	**9,468m**	Displacement/Length ratio			**4,5679**

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SCORING OPTIONS

	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	**613,1**			**681,0**		
Time on Time	**0,9786**			**0,9912**		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	**720,8**	**559,6**	**498,9**	**930,3**	**683,4**	**594,3**
Time on Time	**0,9364**	**1,2062**	**1,3530**	**0,7256**	**0,9877**	**1,1358**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	**1027,0**	**852,3**	**752,3**	**713,7**	**697,8**	**690,0**	**683,0**
52°	**677,6**	**574,7**	**529,1**	**512,2**	**505,7**	**502,3**	**499,5**
60°	**642,4**	**553,6**	**517,5**	**500,7**	**492,9**	**488,6**	**485,6**
75°	**618,2**	**539,5**	**509,0**	**489,6**	**474,8**	**465,8**	**457,9**
90°	**628,2**	**540,9**	**505,7**	**487,8**	**468,3**	**450,3**	**428,5**
110°	**649,2**	**540,8**	**500,5**	**473,2**	**447,7**	**431,1**	**409,8**
120°	**670,8**	**553,8**	**506,6**	**478,6**	**450,1**	**423,2**	**386,3**
135°	**744,8**	**606,0**	**531,0**	**497,9**	**471,4**	**443,1**	**387,7**
150°	**890,3**	**704,6**	**594,1**	**529,3**	**498,6**	**473,9**	**422,4**
Run VMG	**1028,0**	**813,6**	**685,6**	**601,1**	**544,1**	**508,6**	**460,0**
Selected Courses							
Windward / Leeward	**1027,5**	**833,0**	**718,9**	**657,4**	**620,9**	**599,3**	**571,5**
Circular Random	**866,3**	**700,7**	**612,3**	**561,1**	**529,5**	**508,5**	**480,6**
Coastal / Long Distance	**1027,6**	**784,0**	**651,6**	**579,3**	**540,8**	**509,9**	**460,2**
Non Spinnaker	**914,4**	**734,6**	**637,7**	**581,1**	**546,1**	**522,9**	**492,3**

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°**	**40,6°**	**39,2°**	**37,6°**	**36,8°**	**36,4°**	**36,3°**
Beat VMG	**3,51**	**4,22**	**4,79**	**5,04**	**5,16**	**5,22**	**5,27**
52°	**5,31**	**6,26**	**6,80**	**7,03**	**7,12**	**7,17**	**7,21**
60°	**5,60**	**6,50**	**6,96**	**7,19**	**7,30**	**7,37**	**7,41**
75°	**5,82**	**6,67**	**7,07**	**7,35**	**7,58**	**7,73**	**7,86**
90°	**5,73**	**6,66**	**7,12**	**7,38**	**7,69**	**8,00**	**8,40**
110°	**5,54**	**6,66**	**7,19**	**7,61**	**8,04**	**8,35**	**8,78**
120°	**5,37**	**6,50**	**7,11**	**7,52**	**8,00**	**8,51**	**9,32**
135°	**4,83**	**5,94**	**6,78**	**7,23**	**7,64**	**8,12**	**9,28**
150°	**4,04**	**5,11**	**6,06**	**6,80**	**7,22**	**7,60**	**8,52**
Run VMG	**3,50**	**4,42**	**5,25**	**5,99**	**6,62**	**7,08**	**7,83**
Gybe Angles	**145,0°**	**149,7°**	**150,6°**	**158,1°**	**180,0°**	**180,0°**	**180,0°**

Rating Office

Asociacion de Veleros Oceánicos del Perú.
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AVOP

Certificate

Number **PERI29**
ORC Ref **N/A**
Issued On **24/09/2019**
VPP Ver. **2019 1.01**

Invalid for Racing

Crew Weight

Default	637kg
Maximum	**637kg**
Minimum*	**478kg**

*when applied by the NoR and SI

Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	**657,9**	**0,9120**
Non Spin OSN	**638,3**	**0,9400**

Sails Limitations

Headsails	Spinnakers
5	**3**

Class Division Length

CDL = **9,092**

Storm Sails Areas

Heavy Weather Jib	**19,51**
Storm Jib (JL=7,82)	**7,23**
Storm Trysail	**9,66**

Owner

ALEC HUGUES P.

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature

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BOAT

Name	**RAVEN a**	Sail Nr	**PER 43833**
File	**PER43833 B**	Data in	**meters/kilograms**

RIG

Forestay Tension	**Aft**	Spreaders	**2**
Inner Stay	**None Fitted**	Runners	**1**
Carbon Mast	**No**	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	**12,000**	E	**4,600**	MDT1	**0,085**	MW	**0,117**
IG	**12,020**	J	**3,390**	MDL1	**0,164**	GO	**0,117**
ISP	**12,285**	SFJ	**0,187**	MDT2	**0,085**	BD	**0,160**
BAS	**1,495**	SPL	**3,600**	MDL2	**0,117**	MWT	
FSP	**0,052**	TPS		TL	**0,975**	MCG	

INCLINING TEST AND FREEBOARDS

Inclining Test **Current Inclining**

Flotation date **16/06/2017** SG **1,0253**

FFM	**1,082**	FF	**1,082**	SFFP	**0,270**
FAM	**0,939**	FA	**0,942**	SAFP	**8,860**
W1	**50,0**	PD1	**569,0**	WD	**11,500**
W2	**50,0**	PD2	**557,0**	GSA	**1,0**
W3	**50,0**	PD3	**552,3**	RSA	**1,0**
W4	**50,0**	PD4	**562,7**	PLM	**9000,0**

LCF from stem on CL / on sheer	**5,538 / 5,720**
Maximum beam station from stem	**6,350**
RM Measured	**80,8kg·m**
RM Default	**90,3kg·m**
Limit of positive stability / Stab.Index	**108,5° / 108,5**
Freeboard at mast at 3,577	**0,996**

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MIZZEN RIG AND SAILS

N/A

PROPELLER

Installation	**Shaft exposed**	PRD	**0,305**
Type	**Feathering 2 blades**	PBW	**0,084**
Twin Screw	**No**	PIPA	**0,0030**

PSA	**16,000**	PHL	**0,135**	ST3	**0,100**	ESL	**0,852**
PSD	**0,025**	ST1	**0,025**	ST4	**0,042**		
PHD	**0,050**	ST2	**0,100**	ST5	**0,170**		

Certificate

Number **PERI29**
ORC Ref **N/A**
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AVOP

COMMENTS

MOVABLE BALLAST

N/A

CENTERBOARD

N/A

SAILS (Maximum Areas)

Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula
	0,180	0,96	1,74	3,00	3,93	33,18	34,02	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	**SLU**	**SLE**	**SL**	**SHW**	**SFL**			
	12,45	12,45	12,45	6,67	6,41	68,66		SL · (SFL + 4·SHW) / 6

Asymmetric
Not Available

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	0,63	1,20	2,38	3,62	4,88	12,12	29,35			11/09/2019	Kevlar	REMEDICION

MEASUREMENT INVENTORY

Measurer
Date **16/06/2017**
Comment

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

Id	*Item*	*Maker*	*Model*
C4	Engine	westrebeke 12 HP	

Id	*Item*	*Weight*	*Description*

MEASUREMENT INVENTORY

Id	*Item*	*Tank Use*	*Tank Type*	*Capcty*	*Dist.*	*VCG*	*Condtn*	*Description*
e6	Tank	Diesel	flex	55,0	6,43	0,20	~~27,0~~	ubicado bajo camilla
4B	Tank	Agua	flex	100,0	5,55	0,20	~~0,0~~	ubicado bajo camilla

Id	*Item*	*Weight*	*Distance*	*VCG*	*Description*
E7	Battery	28,0	5,45	0,20	2 baerias bajo camilla estribor

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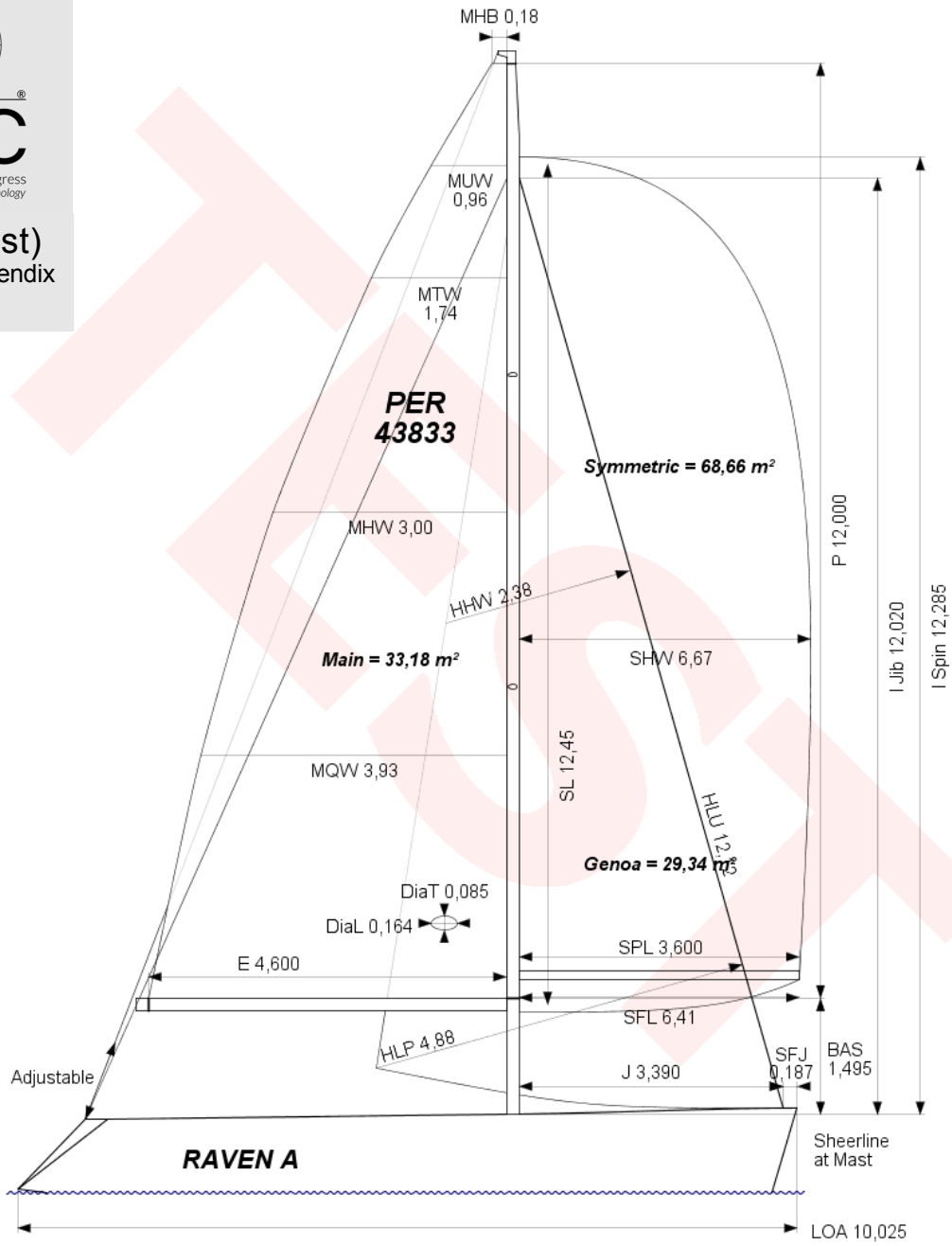
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
M1	0,18	0,96	1,74	3,00	3,93	33,18	GL	11/09/2019	NORTH	Kevlar	REMEDICION

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
G2	0,08	0,63	1,20	2,38	3,62	4,88	12,12	144%	29,35			GL	11/09/2019	NORTH	Kevlar	REMEDICION

SYMMETRIC SPINNAKERS (3)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S2	12,45	12,45	12,45	6,67	6,41	68,67		26/03/2015	NORTH	Nylon	REMEDICION
S3	11,99	11,99	11,99	6,62	6,40	65,71	GL	11/09/2019	NORTH	Nylon	REMEDICION
S1	11,93	11,93	11,93	6,23	6,34	62,16		26/03/2015	NORTH	Nylon	REMEDICION

ASYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment

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