

BOAT	GPH	HULL
Name GALLANT Sail Nr NA 24	606.4	Length Overall 13.410m Maximum Beam 3.831m Displacement 12,554kg Draft 2.257m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.306% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension 0.00
GENERAL		IMSL 11.325m VCGD -0.116m Sink 26.81kg/mm RL 9.020m VCGM -0.101m WS 38.07m² LSM0 11.279m Displacement/Length ratio 8.7492
Class NAVY 44 II PEDRICK Designer PEDRICK Builder PEARSON Series 01/2007, CIN 3 Age 01/2007 Age Allowance 0.390% Offset File US41723.off - 10/05/2017 13:40:36 Measurement by - 20/05/2019		



ORC
Offshore Racing Congress
World leader in rating technology

2019
ORC International
Certificate

Rating Office

Offshore
Racing
Congress

COPY ONLY for Rating

World Leader In Rating Technology

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	589.4			658.0		
Time on Time	1.0180			1.0258		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	699.3	536.1	477.3	903.5	664.8	568.9
Time on Time	0.9653	1.2591	1.4143	0.7471	1.0153	1.1865

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1016.5	848.2	753.5	703.1	676.9	663.1	654.1
52°	664.2	563.1	503.8	479.7	469.9	464.6	460.5
60°	627.9	534.8	486.8	467.4	457.8	452.8	448.3
75°	600.5	513.8	475.4	457.8	446.6	438.4	429.5
90°	605.4	515.8	474.5	455.6	442.8	432.2	414.5
110°	635.7	523.0	470.2	447.8	432.1	421.9	406.8
120°	649.8	534.3	474.8	449.8	432.0	415.4	392.5
135°	713.9	581.4	500.1	463.4	443.3	425.9	392.0
150°	844.5	670.7	567.9	499.9	464.9	445.7	412.9
Run VMG	975.1	774.4	655.8	572.9	520.4	479.6	439.2
Selected Courses							
Windward / Leeward	995.8	811.3	704.6	638.0	598.6	571.4	546.7
Circular Random	837.5	675.4	588.2	537.4	506.4	486.6	463.5
Coastal / Long Distance	993.7	761.8	632.6	555.0	515.1	485.9	443.7
Non Spinnaker	884.6	709.2	613.5	556.8	521.6	498.7	471.4

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	43.4°	41.7°	41.8°	41.8°	40.6°	40.0°	39.8°
Beat VMG	3.54	4.24	4.78	5.12	5.32	5.43	5.50
52°	5.42	6.39	7.15	7.50	7.66	7.75	7.82
60°	5.73	6.73	7.40	7.70	7.86	7.95	8.03
75°	6.00	7.01	7.57	7.86	8.06	8.21	8.38
90°	5.95	6.98	7.59	7.90	8.13	8.33	8.69
110°	5.66	6.88	7.66	8.04	8.33	8.53	8.85
120°	5.54	6.74	7.58	8.00	8.33	8.67	9.17
135°	5.04	6.19	7.20	7.77	8.12	8.45	9.18
150°	4.26	5.37	6.34	7.20	7.74	8.08	8.72
Run VMG	3.69	4.65	5.49	6.28	6.92	7.51	8.20
Gybe Angles	145.1°	149.8°	149.8°	153.6°	162.7°	180.0°	180.0°

Certificate

Number **US6313**
ORC Ref **US00000111**
Issued On **30/05/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight

Default **817kg**
Maximum **817kg**
Minimum* **613kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **633.0 0.9479**
Non Spin OSN **615.7 0.9746**

Sails Limitations

Headsails	Spinnakers
6	4

Dacron Sails

Class Division Length

CDL = 10.173

Storm Sails Areas

Heavy Weather Jib **42.22**
Storm Jib (JL=11.50) **15.64**
Storm Trysail **15.41**

Owner

BOAT							
Name	GALLANT			Sail Nr	NA 24		
File	GALLANT Navy 44			Data in	meters/kilograms		
RIG							
Forestay Tension	Aft			Spreaders		2	
Inner Stay	Adjustable			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 Bowspirt							
P	15.240	E	5.775	MDT1	0.155	MW	0.204
IG	17.484	J	5.525	MDL1	0.245	GO	0.266
ISP	17.434	SFJ	0.000	MDT2	0.155	BD	0.210
BAS	1.864	SPL	5.630	MDL2	0.245	MWT	
FSP	0.076	TPS	0.000	TL	2.680	MCG	

INCLINING TEST AND FREEBOARDS					
Inclining Test Boom Inclining				LCFD	7.530
Flotation date 20/05/2019				SG	1.0040
FFM	1.398	FF	1.477	SFFP	0.998
FAM	1.082	FA	1.057	SAFP	12.815
W1	137.7	PD1	235.8	WD	5.430
W2	137.7	PD2	234.6	GSA	1.0
W3	137.7	PD3	228.5	RSA	1.0
W4	137.7	PD4	230.2	PLM	9000.0
LCF from stem on CL / on sheer				7.581 / 7.817	
Maximum beam station from stem				7.989	
RM Measured				253.5kg·m	
RM Default				258.4kg·m	
Limit of positive stability / Stab.Index				123.0° / 132.1	
Freeboard at mast at 5.525				1.217	



2019 IMS Measurement Certificate

MIZZEN RIG AND SAILS	
	N/A

PROPELLER							
Installation Type	Shaft exposed Feathering 2 blades					PRD	0.489
Twin Screw	No					PBW	0.152
						PIPA	0.0083
PSA	30.000	PHL	0.155	ST3	0.146	ESL	0.847
PSD	0.025	ST1	0.030	ST4	0.064		
PHD	0.073	ST2	0.122	ST5	0.226		

Certificate
Number **US6313**
ORC Ref **US00000111**
Issued On **30/05/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

COMMENTS	

MOVABLE BALLAST	
	N/A

CENTERBOARD	
	N/A

SAILS (Maximum Areas)							
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)
	0.140	1.04	1.87	3.36	4.42	48.10	48.71
						Formula	
						P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL		
	17.62	17.62	17.62	10.00	10.00	146.83	
						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
0.01	0.99	1.96	3.97	6.14	8.39	17.57	71.70			28/05/2019		#1 Hank on Dacron Genoa

MEASUREMENT INVENTORY

Measurer

Date 20/05/2019

Comment

IdItemWeightDistanceVCGDescription

SaSTools171.00.00-0.10Sailor Services

MEASUREMENT INVENTORY

IdItemTank UseTank TypeCapctyDist.VCGCondnDescription

3TankWaterAlum130.06.90-0.200-0centerline day tank

2TankWaterAlum265.05.400.200-0Port & stbd sides

1TankFuelAlum208.06.23-0.20436-0centerline tank

IdItemWeightDistanceVCGDescription

2Battery25.09.100.1012V engine battery

1Battery90.07.100.103 x 12V house batteries, port side

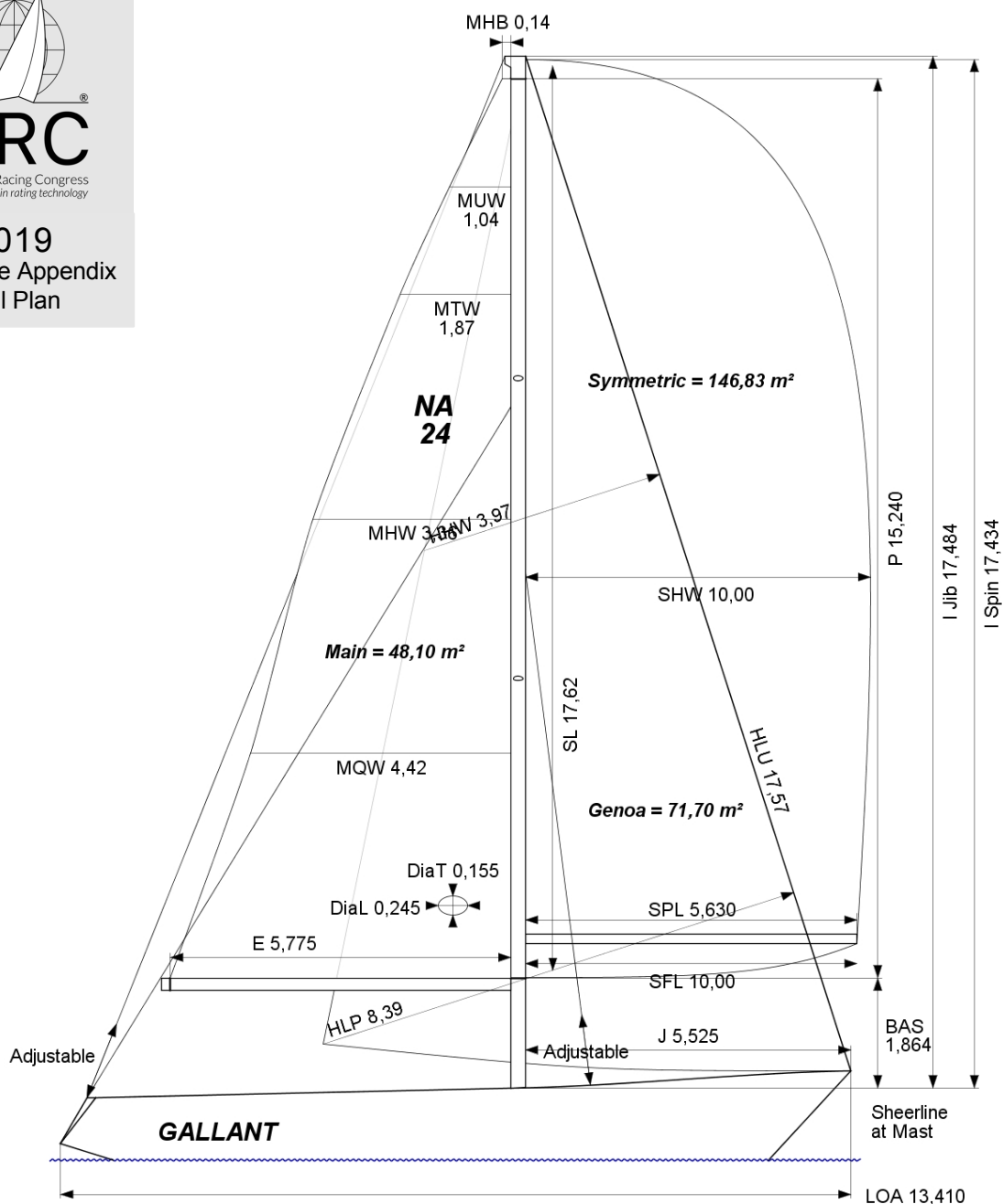
1Misc25.013.003.00Radar unit + SS mast



ORC

Offshore Racing Congress
World leader in rating technology

2019
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Meas.Date	Manufacture	Material	Comment
5367-18	0.14	1.04	1.87	3.36	4.42	48.11				28/05/2019	JEFF TODD		2018 NAVAL

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Meas.Date	Manufacture	Material	Comment
5303-18	0.01	0.99	1.96	3.97	6.14	8.39	17.57	152%	71.70	28/05/2019	JEFF TODD		#1 Hank on Dacron

SYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Meas.Date	Manufacture	Material	Comment
5007-13	17.62	17.62	17.62	10.00	10.00	146.84	28/05/2019	JEFF TODD		1.0 SPINNAKER

ASYMMETRIC SPINNAKERS (0)

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