## BOAT

Name **KURRANULLA**
Sail Nr **USA 38007**

## GPH

**580.4**

## GENERAL

| | |
|---|---|
| Class | **SYDNEY 38** |
| Designer | **DOVELL** |
| Builder | **SYDNEY YACHTS** |
| Series | **02/2000** |
| Age | **01/2001** |
| Age Allowance | **0.487%** |
| Offset File | **SYD38.OFF - 17/11/2000 09:55:36** |
| Measurement by | **- 06/08/2016** |

## HULL

| | |
|---|---|
| Length Overall | **11.795m** |
| Maximum Beam | **3.706m** |
| Displacement | **5,590kg** |
| Draft | **2.613m** |
| IMS Reg. Division | |
| Dynamic Allowance | **0.010%** |
| Fwd Accommodation | |
| Hull Construction | **Cored** |
| Carbon Rudder | |
| Crew Arm Extension | |

| | | | | | |
|---|---|---|---|---|---|
| IMSL | **10.767m** | VCGD | **-0.146m** | Sink | **21.38kg/mm** |
| RL | **10.018m** | VCGM | **-0.048m** | WS | **28.29m²** |
| LSM0 | **10.654m** | Displacement/Length ratio | | | **4.6225** |

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## Rating Office

**Offshore Racing Congress**

Invalid for Racing
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## SCORING OPTIONS

| | COASTAL / LONG DISTANCE | | | WINDWARD / LEEWARD | | |
|---|---|---|---|---|---|---|
| Time On Distance | **565.5** | | | **634.3** | | |
| Time On Time | **1.0611** | | | **1.0642** | | |
| Triple Number | Low | Medium | High | Low | Medium | High |
| Time on Distance | **667.7** | **514.1** | **453.5** | **872.0** | **637.8** | **549.3** |
| Time on Time | **1.0110** | **1.3131** | **1.4884** | **0.7741** | **1.0583** | **1.2289** |

## TIME ALLOWANCES

| Wind Velocity | 6 kt | 8 kt | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
|---|---|---|---|---|---|---|---|
| Beat VMG | **966.8** | **797.0** | **701.7** | **667.1** | **651.0** | **638.8** | **628.1** |
| 52° | **630.8** | **526.5** | **481.6** | **468.5** | **462.3** | **458.6** | **449.6** |
| 60° | **592.8** | **502.2** | **468.1** | **454.6** | **447.8** | **443.6** | **432.4** |
| 75° | **561.7** | **486.4** | **457.0** | **436.6** | **423.3** | **416.0** | **408.8** |
| 90° | **562.6** | **485.7** | **453.5** | **433.3** | **410.7** | **393.1** | **378.1** |
| 110° | **590.8** | **490.6** | **453.1** | **423.6** | **398.3** | **384.5** | **361.5** |
| 120° | **613.6** | **504.6** | **461.5** | **433.2** | **403.3** | **374.7** | **342.8** |
| 135° | **694.6** | **558.9** | **489.4** | **457.3** | **431.1** | **403.6** | **348.4** |
| 150° | **833.9** | **659.3** | **554.1** | **490.3** | **458.6** | **433.8** | **383.4** |
| Run VMG | **963.0** | **761.3** | **639.6** | **560.3** | **507.3** | **469.7** | **420.8** |
| **Selected Courses** | | | | | | | |
| Windward / Leeward | **964.9** | **779.2** | **670.7** | **613.7** | **579.1** | **554.2** | **524.5** |
| Circular Random | **801.7** | **646.5** | **563.1** | **514.4** | **483.7** | **462.8** | **434.6** |
| Ocean for PCS | **990.9** | **762.7** | **633.9** | **554.9** | **503.0** | **465.9** | **413.3** |
| Non Spinnaker | **843.3** | **676.1** | **585.4** | **531.8** | **498.1** | **475.3** | **444.8** |

## 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 | **43.1°** | **42.0°** | **40.6°** | **38.9°** | **38.5°** | **37.8°** | **37.8°** |
| Beat VMG | **3.72** | **4.52** | **5.13** | **5.40** | **5.53** | **5.64** | **5.73** |
| 52° | **5.71** | **6.84** | **7.47** | **7.68** | **7.79** | **7.85** | **8.01** |
| 60° | **6.07** | **7.17** | **7.69** | **7.92** | **8.04** | **8.12** | **8.32** |
| 75° | **6.41** | **7.40** | **7.88** | **8.25** | **8.50** | **8.65** | **8.81** |
| 90° | **6.40** | **7.41** | **7.94** | **8.31** | **8.77** | **9.16** | **9.52** |
| 110° | **6.09** | **7.34** | **7.95** | **8.50** | **9.04** | **9.36** | **9.96** |
| 120° | **5.87** | **7.13** | **7.80** | **8.31** | **8.93** | **9.61** | **10.50** |
| 135° | **5.18** | **6.44** | **7.36** | **7.87** | **8.35** | **8.92** | **10.33** |
| 150° | **4.32** | **5.46** | **6.50** | **7.34** | **7.85** | **8.30** | **9.39** |
| Run VMG | **3.74** | **4.73** | **5.63** | **6.42** | **7.10** | **7.67** | **8.55** |
| Gybe Angles | **139.8°** | **148.0°** | **151.0°** | **155.8°** | **170.9°** | **180.0°** | **180.0°** |

## Certificate

Number **US6046**
ORC Ref **USA00000982**
Issued On **24/05/2017**
VPP Ver. **2017 1.00**
Valid until **28/02/2018**

## Crew Weight

| | |
|---|---|
| Declared | **753kg** |
| Default* | **753kg** |
| Non Manual Pwr | |

## Special Scoring

| | ToD | ToT |
|---|---|---|
| Non Spin GPH | **604.0** | **0.9934** |
| Non Spin OSN | **588.5** | **1.0196** |

## Sails Limitations

| Headsails | Spinnakers |
|---|---|
| **6** | **4** |

## Class Division Length

CDL = **10.393**

## Storm Sails Areas

| | |
|---|---|
| Heavy Weather Jib | **34.38** |
| Storm Jib (JL=10.37) | **12.73** |
| Storm Trysail | **14.84** |

## Owner

## BOAT

| | | | |
|---|---|---|---|
| Name | **KURRANULLA** | Sail Nr | **USA38007** |
| File | **US6046** | Data in | **meters/kilograms** |

## RIG

| | | | |
|---|---|---|---|
| Forestay Tension | **Aft** | Spreaders | **2** |
| Inner Stay | **None Fitted** | Runners | **0** |
| Carbon Mast | | Jumper Struts | **None** |
| Taper Hollows | | Jib Furler | |
| Fiber Rigging | | Main Furler | |
| Lenticular Rigging | | Without Backstay | |
| Articulated Bowsprit | **No** | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| P | **15.400** | E | **5.506** | MDT1 | **0.130** | MW | **0.200** |
| IG | **15.870** | J | **4.500** | MDL1 | **0.200** | GO | **0.225** |
| ISP | **15.963** | SFJ | **0.000** | MDT2 | **0.120** | BD | **0.190** |
| BAS | **1.903** | SPL | **4.500** | MDL2 | **0.160** | MWT | **225.50** |
| FSP | **0.068** | TPS | | TL | **1.180** | MCG | **5.083** |

## MIZZEN RIG AND SAILS

**N/A**

## COMMENTS

DATA FROM 2016 ORR FM

## INCLINING TEST AND FREEBOARDS

Inclining Test **Current Inclining**

Flotation date **18/04/2016** SG **1.0050**

| | | | | | |
|---|---|---|---|---|---|
| FFM | **1.303** | FF | **1.310** | SFFP | **0.280** |
| FAM | **1.073** | FA | **1.077** | SAFP | **11.350** |
| W1 | **105.4** | PD1 | **612.4** | WD | **12.175** |
| W2 | **105.4** | PD2 | **612.4** | GSA | **1.0** |
| W3 | **105.4** | PD3 | **612.4** | RSA | **1.0** |
| W4 | **105.4** | PD4 | **612.4** | PLM | **9000.0** |

| | |
|---|---|
| LCF from stem on CL / on sheer | **6.508 / 6.746** |
| Maximum beam station from stem | **7.499** |
| RM Measured | **165.0kg·m** |
| RM Default | **166.4kg·m** |
| Limit of positive stability / Stab.Index | **119.3° / 118.9** |
| Freeboard at mast at 4.500 | **1.155** |

## PROPELLER

| | | | | | |
|---|---|---|---|---|---|
| Installation | **Strut** | | | PRD | **0.410** |
| Type | **Folding 2 blades** | | | PBW | **0.105** |
| Twin Screw | | | | PIPA | **0.0035** |
| ST1 | **0.042** | ST3 | **0.180** | ST5 | **0.263** |
| ST2 | **0.180** | ST4 | **0.112** | EDL | **0.885** |

## MOVEABLE BALLAST

**N/A**

## CENTERBOARD

**N/A**

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# 2017
# IMS Measurement Certificate

## Certificate

Number **US6046**
ORC Ref **USA00000982**
Issued On **24/05/2017**
VPP Ver. **2017 1.00**
Valid until **28/02/2018**


## SAILS (Maximum Areas)

| Mainsail | MHB | MUW | MTW | MHW | MQW | Area | Area (r) | Formula |
|---|---|---|---|---|---|---|---|---|
| | 0.160 | 1.18 | 2.09 | 3.57 | 4.97 | 51.94 | 53.17 | P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB) |

**Symmetric**
Not Available

| Asymmetric | SLU | SLE | SL | SHW | SFL | | Area (r) | |
|---|---|---|---|---|---|---|---|---|
| | 15.55 | 14.10 | 14.82 | 6.46 | 8.05 | 83.74 | 85.08 | 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 | 0.66 | 1.26 | 2.42 | 3.58 | 4.70 | 16.08 | 38.68 | | | | Unknow | |

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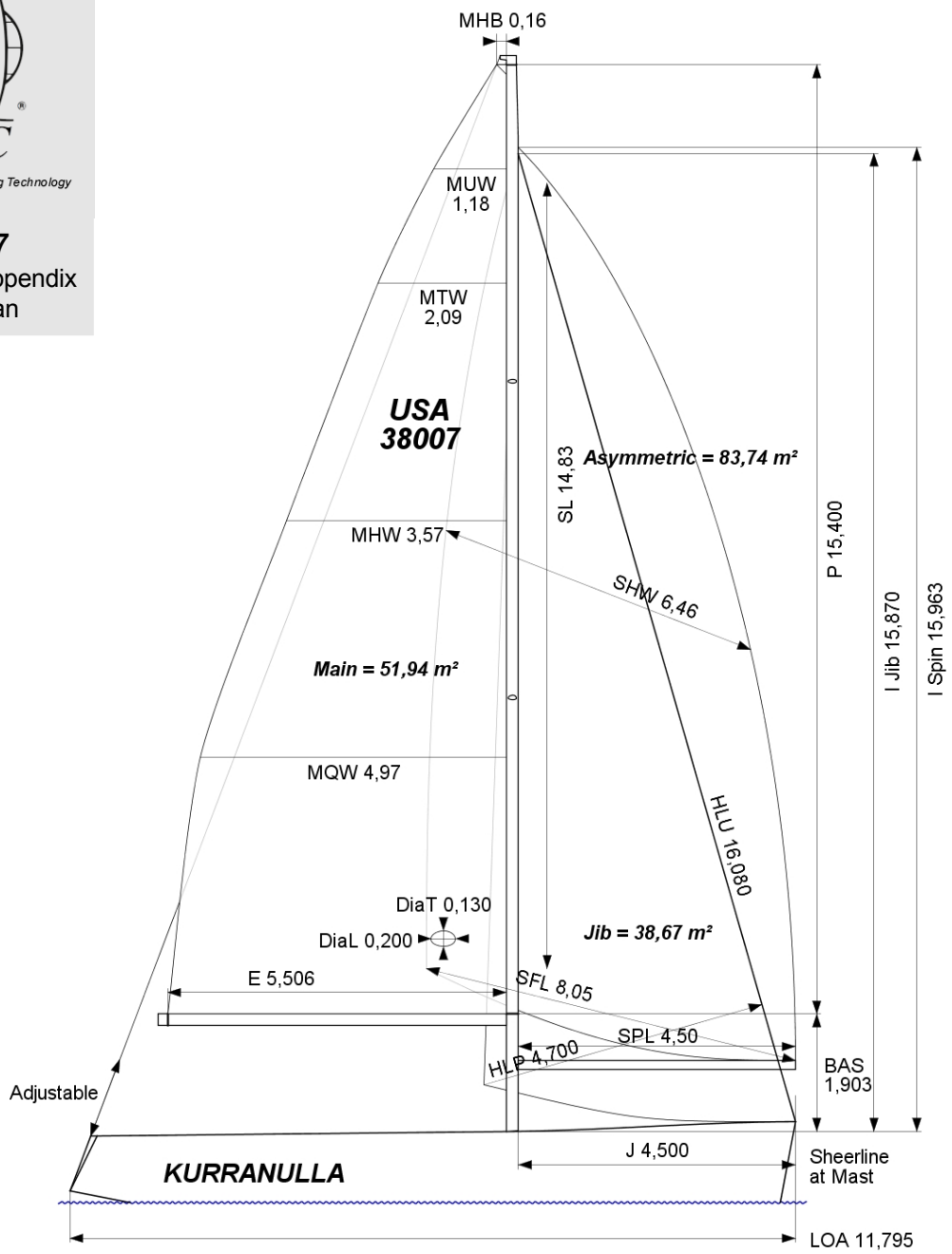
# 2017
## Certificate Appendix
## Sail Plan




## SAILS INVENTORY

**MAINSAIL (1)**

| Id | MHB | MUW | MTW | MHW | MQW | Area | Measurer | Meas.Date | Manufacture | Material | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.160 | 1.18 | 2.09 | 3.57 | 4.97 | 51.94 | | | | Unknown | |

**HEADSAILS (1)**

| Id | HHB | HUW | HTW | HHW | HQW | HLP | HLU | Ovrlp | Area | Btn | Fly | Measurer | Meas.Date | Manufacture | Material | Comment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L1 | 0.08 | 0.66 | 1.26 | 2.42 | 3.58 | 4.70 | 16.08 | 104% | 38.68 | | | | | | Unknow | |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.55 | 14.10 | 14.82 | 6.46 | 8.05 | 83.74 | asym | | | | Unknown | |