

|   |                            |   |
|---|----------------------------|---|
| <b>BOAT</b><br>Name <b>BLACK JACK</b><br>Sail Nr <b>GRE-4242</b>  | <b>GPH</b><br><b>495.8</b> | <b>HULL</b><br>Length Overall <b>12.790m</b><br>Maximum Beam <b>3.886m</b><br>Displacement <b>4,465kg</b><br>Draft <b>3.013m</b><br>IMS Reg. Division <b>Performance</b><br>Dynamic Allowance <b>0.001%</b><br>Fwd Accommodation <b>No</b><br>Hull Construction <b>Carbon</b><br>Carbon Rudder <b>Yes</b><br>Crew Arm Extension |
| <b>GENERAL</b><br>Class <b>GP 42</b><br>Designer <b>FARR</b><br>Builder <b>LATINI</b><br>Series <b>06/2006</b><br>Age <b>06/2006</b><br>Age Allowance <b>0.422%</b><br>Offset File <b>GP42F-D.off - 27/08/2019 15:24:44</b><br>Measurement by - <b>21/06/2006</b> |                            | IMSLS <b>12.297m</b> VCGD <b>-0.943m</b> Sink <b>22.47kg/mm</b><br>RL <b>12.696m</b> VCGM <b>-0.926m</b> WS <b>29.03m<sup>2</sup></b><br>LSM0 <b>11.937m</b> Displacement/Length ratio <b>2.6250</b>  |



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| SCORING OPTIONS  |                         |               |               |                    |               |               |
|------------------|-------------------------|---------------|---------------|--------------------|---------------|---------------|
| Time on Distance | COASTAL / LONG DISTANCE |               |               | WINDWARD / LEEWARD |               |               |
|                  | <b>481.5</b>            |               |               | <b>544.2</b>       |               |               |
| Time on Time     | <b>1.2460</b>           |               |               | <b>1.2404</b>      |               |               |
| Triple Number    | Low                     | Medium        | High          | Low                | Medium        | High          |
| Time on Distance | <b>566.5</b>            | <b>441.6</b>  | <b>380.7</b>  | <b>732.7</b>       | <b>550.9</b>  | <b>469.0</b>  |
| Time on Time     | <b>1.1916</b>           | <b>1.5287</b> | <b>1.7730</b> | <b>0.9213</b>      | <b>1.2253</b> | <b>1.4392</b> |

| TIME ALLOWANCES |              |              |              |              |              |              |              |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity   | 6 kt         | 8 kt         | 10 kt        | 12 kt        | 14 kt        | 16 kt        | 20 kt        |
| Beat VMG        | <b>836.1</b> | <b>676.2</b> | <b>614.6</b> | <b>592.6</b> | <b>582.4</b> | <b>569.8</b> | <b>564.4</b> |
| 52°             | <b>544.5</b> | <b>455.5</b> | <b>430.2</b> | <b>420.0</b> | <b>413.7</b> | <b>407.5</b> | <b>396.3</b> |
| 60°             | <b>511.5</b> | <b>441.0</b> | <b>415.6</b> | <b>401.7</b> | <b>393.2</b> | <b>388.0</b> | <b>372.5</b> |
| 75°             | <b>486.7</b> | <b>431.4</b> | <b>398.2</b> | <b>373.5</b> | <b>361.4</b> | <b>353.8</b> | <b>339.3</b> |
| 90°             | <b>491.7</b> | <b>434.2</b> | <b>400.1</b> | <b>364.9</b> | <b>339.8</b> | <b>325.5</b> | <b>310.3</b> |
| 110°            | <b>494.7</b> | <b>424.6</b> | <b>390.8</b> | <b>367.1</b> | <b>344.8</b> | <b>323.8</b> | <b>276.7</b> |
| 120°            | <b>510.0</b> | <b>428.7</b> | <b>382.8</b> | <b>353.7</b> | <b>334.5</b> | <b>312.4</b> | <b>272.4</b> |
| 135°            | <b>573.7</b> | <b>454.0</b> | <b>408.5</b> | <b>364.0</b> | <b>321.8</b> | <b>289.1</b> | <b>251.6</b> |
| 150°            | <b>688.8</b> | <b>539.6</b> | <b>460.4</b> | <b>411.7</b> | <b>376.7</b> | <b>335.6</b> | <b>261.0</b> |
| Run VMG         | <b>795.3</b> | <b>623.1</b> | <b>531.7</b> | <b>478.6</b> | <b>434.9</b> | <b>387.5</b> | <b>301.4</b> |

**Certificate**  
Number **01102P**  
ORC Ref **GRE01016258**  
Issued On **27/08/2019**  
VPP Ver. **2019 1.01**  
Valid until **28/02/2020**

**Crew Weight**  
Default **886kg**  
Maximum **948kg**  
Minimum\* **711kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

|              | ToD          | ToT           |
|--------------|--------------|---------------|
| Double H.GPH | <b>511.7</b> | <b>1.1725</b> |
| Double H.OSN | <b>500.5</b> | <b>1.1988</b> |
| Non Spin GPH | <b>539.2</b> | <b>1.1128</b> |
| Non Spin OSN | <b>526.2</b> | <b>1.1402</b> |

| Selected Courses        |              |              |              |              |              |              |              |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Windward / Leeward      | <b>815.7</b> | <b>649.6</b> | <b>573.1</b> | <b>535.6</b> | <b>508.7</b> | <b>478.7</b> | <b>432.9</b> |
| Circular Random         | <b>683.6</b> | <b>552.2</b> | <b>481.6</b> | <b>439.3</b> | <b>410.8</b> | <b>389.2</b> | <b>355.5</b> |
| Coastal / Long Distance | <b>813.7</b> | <b>611.9</b> | <b>517.2</b> | <b>461.1</b> | <b>426.3</b> | <b>392.0</b> | <b>336.0</b> |
| Non Spinnaker           | <b>758.5</b> | <b>606.2</b> | <b>522.7</b> | <b>472.2</b> | <b>439.0</b> | <b>415.2</b> | <b>381.6</b> |

**Sails Limitations**

|           |            |
|-----------|------------|
| Headsails | Spinnakers |
| <b>7</b>  | <b>5</b>   |

| 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                                       | <b>43.4°</b>  | <b>41.7°</b>  | <b>39.1°</b>  | <b>37.9°</b>  | <b>37.3°</b>  | <b>36.6°</b>  | <b>36.8°</b>  |
| Beat VMG  | <b>4.31</b>   | <b>5.32</b>   | <b>5.86</b>   | <b>6.07</b>   | <b>6.18</b>   | <b>6.32</b>   | <b>6.38</b>   |
| 52°   | <b>6.61</b>   | <b>7.90</b>   | <b>8.37</b>   | <b>8.57</b>   | <b>8.70</b>   | <b>8.83</b>   | <b>9.08</b>   |
| 60°   | <b>7.04</b>   | <b>8.16</b>   | <b>8.66</b>   | <b>8.96</b>   | <b>9.16</b>   | <b>9.28</b>   | <b>9.66</b>   |
| 75°   | <b>7.40</b>   | <b>8.34</b>   | <b>9.04</b>   | <b>9.64</b>   | <b>9.96</b>   | <b>10.18</b>  | <b>10.61</b>  |
| 90°   | <b>7.32</b>   | <b>8.29</b>   | <b>9.00</b>   | <b>9.87</b>   | <b>10.59</b>  | <b>11.06</b>  | <b>11.60</b>  |
| 110°  | <b>7.28</b>   | <b>8.48</b>   | <b>9.21</b>   | <b>9.81</b>   | <b>10.44</b>  | <b>11.12</b>  | <b>13.01</b>  |
| 120°  | <b>7.06</b>   | <b>8.40</b>   | <b>9.40</b>   | <b>10.18</b>  | <b>10.76</b>  | <b>11.52</b>  | <b>13.22</b>  |
| 135°  | <b>6.28</b>   | <b>7.93</b>   | <b>8.81</b>   | <b>9.89</b>   | <b>11.19</b>  | <b>12.45</b>  | <b>14.31</b>  |
| 150°  | <b>5.23</b>   | <b>6.67</b>   | <b>7.82</b>   | <b>8.74</b>   | <b>9.56</b>   | <b>10.73</b>  | <b>13.79</b>  |
| Run VMG   | <b>4.53</b>   | <b>5.78</b>   | <b>6.77</b>   | <b>7.52</b>   | <b>8.28</b>   | <b>9.29</b>   | <b>11.94</b>  |
| Gybe Angles                                       | <b>141.2°</b> | <b>140.9°</b> | <b>148.0°</b> | <b>151.9°</b> | <b>148.0°</b> | <b>144.2°</b> | <b>143.9°</b> |

**Class Division Length**  
CDL = **12.498**

**Storm Sails Areas**  
Heavy Weather Jib **35.69**  
Storm Jib (JL=10.57) **13.22**  
Storm Trysail **17.53**

**Owner**

|                        |                                 |
|------------------------|---------------------------------|
| <b>BOAT</b>            |                                 |
| Name <b>BLACK JACK</b> | Sail Nr <b>GRE-4242</b>         |
| File <b>I4242</b>      | Data in <b>meters/kilograms</b> |

|  |                  |                       |
|--|------------------|-----------------------|
| <b>INCLINING TEST AND FREEBOARDS</b>     |                  |                       |
| Inclining Test <b>Current Inclining</b>  |                  |                       |
| Flotation date <b>27/08/2019</b>         |                  | SG <b>1.0270</b>      |
| FFM <b>1.340</b>                         | FF <b>1.339</b>  | SFFP <b>0.200</b>     |
| FAM <b>1.034</b>                         | FA <b>1.035</b>  | SAFP <b>12.745</b>    |
| W1 <b>100.0</b>                          | PD1 <b>462.1</b> | WD <b>12.112</b>      |
| W2 <b>100.0</b>                          | PD2 <b>462.5</b> | GSA <b>1.0</b>        |
| W3 <b>100.0</b>                          | PD3 <b>458.4</b> | RSA <b>1.0</b>        |
| W4 <b>100.0</b>                          | PD4 <b>456.6</b> | PLM <b>9000.0</b>     |
| LCF from stem on CL / on sheer           |                  | <b>6.920 / 7.162</b>  |
| Maximum beam station from stem           |                  | <b>8.295</b>          |
| RM Measured                              |                  | <b>207.4kg-m</b>      |
| RM Default                               |                  | <b>170.4kg-m</b>      |
| Limit of positive stability / Stab.Index |                  | <b>143.8° / 140.3</b> |
| Freeboard at mast at 5.205               |                  | <b>1.202</b>          |



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|                                |                            |                   |                   |  |
|--------------------------------|----------------------------|-------------------|-------------------|--|
| <b>RIG</b>                     |                            |                   |                   |  |
| Forestay Tension <b>Aft</b>    | Spreaders <b>2</b>         |                   |                   |  |
| Inner Stay <b>None Fitted</b>  | Runners <b>0</b>           |                   |                   |  |
| Carbon Mast <b>Yes</b>         | Jumper Struts <b>None</b>  |                   |                   |  |
| Taper Hollows <b>No</b>        | Jib Furler <b>No</b>       |                   |                   |  |
| Fiber Rigging <b>No</b>        | Main Furler <b>No</b>      |                   |                   |  |
| Lenticular Rigging <b>No</b>   | Without Backstay <b>No</b> |                   |                   |  |
| Articulated Bowsprit <b>No</b> |                            |                   |                   |  |
| P <b>16.920</b>                | E <b>5.920</b>             | MDT1 <b>0.140</b> | MW <b>0.270</b>   |  |
| IG <b>16.170</b>               | J <b>4.985</b>             | MDL1 <b>0.270</b> | GO <b>0.297</b>   |  |
| ISP <b>18.520</b>              | SFJ <b>0.220</b>           | MDT2 <b>0.095</b> | BD <b>0.257</b>   |  |
| BAS <b>1.720</b>               | SPL <b>0.000</b>           | MDL2 <b>0.170</b> | MWT <b>207.75</b> |  |
| FSP <b>0.064</b>               | TPS <b>7.195</b>           | TL <b>2.280</b>   | MCG <b>5.742</b>  |  |

|                               |  |
|-------------------------------|--|
| <b>Certificate</b>            |  |
| Number <b>01102P</b>          |  |
| ORC Ref <b>GRE01016258</b>    |  |
| Issued On <b>27/08/2019</b>   |  |
| VPP Ver. <b>2019 1.01</b>     |  |
| Valid until <b>28/02/2020</b> |  |

|                             |  |
|-----------------------------|--|
| <b>MIZZEN RIG AND SAILS</b> |  |
| N/A                         |  |

|                              |                    |                  |
|------------------------------|--------------------|------------------|
| <b>PROPELLER</b>             |                    |                  |
| Installation <b>Strut</b>    | PRD <b>0.420</b>   |                  |
| Type <b>Folding 2 blades</b> | PBW <b>0.100</b>   |                  |
| Twin Screw <b>No</b>         | PIPA <b>0.0037</b> |                  |
| ST1 <b>0.038</b>             | ST3 <b>0.180</b>   | ST5 <b>0.280</b> |
| ST2 <b>0.180</b>             | ST4 <b>0.112</b>   | EDL <b>0.855</b> |

|                 |  |
|-----------------|--|
| <b>COMMENTS</b> |  |
| ex "ROMA GP"    |  |

|                        |  |
|------------------------|--|
| <b>MOVABLE BALLAST</b> |  |
| N/A                    |  |

|                    |  |
|--------------------|--|
| <b>CENTERBOARD</b> |  |
| N/A                |  |



|                              |       |       |       |       |       |        |                        |  |  |
|------------------------------|-------|-------|-------|-------|-------|--------|------------------------|--|--|
| <b>SAILS (Maximum Areas)</b> |       |       |       |       |       |        |                        |  |  |
| Mainsail                     | MHB   | MUW   | MTW   | MHW   | MQW   | Area   | Area (r)               | Formula  |  |
|                              | 0.900 | 1.63  | 2.44  | 3.73  | 4.86  | 61.12  | 62.38                  | P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB) |  |
| Symmetric<br>Not Available   |       |       |       |       |       |        |                        |  |  |
| Asymmetric on centerline     | SLU   | SLE   | SL    | SHW   | SFL   | Area   | Formula                |  |  |
|                              | 21.56 | 17.97 | 19.77 | 11.64 | 11.46 | 191.13 | AS · (SFL + 4·SHW) / 6 |  |  |

|   |            |            |            |            |            |            |             |            |            |                  |                 |                |
|---|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------------|-----------------|----------------|
| <b>HEADSAILS</b>  |            |            |            |            |            |            |             |            |            |                  |                 |                |
| Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB) |            |            |            |            |            |            |             |            |            |                  |                 |                |
| <b>HBB</b>  | <b>HUW</b> | <b>HTW</b> | <b>HHW</b> | <b>HQW</b> | <b>HLP</b> | <b>HLU</b> | <b>Area</b> | <b>Btn</b> | <b>Fly</b> | <b>Meas.Date</b> | <b>Material</b> | <b>Comment</b> |
| 0.11  | 0.76       | 1.38       | 2.58       | 3.83       | 5.09       | 15.82      | 41.04       | Y          |            | 03/08/2017       | Carbon          | J1A (3Di)      |
| 0.08  | 0.65       | 1.27       | 2.51       | 3.70       | 4.90       | 14.40      | 35.80       | N          | Y          | 13/08/2019       | Technor         | SS             |
|   |            |            |            |            | 3.29       | 11.10      | 18.59       |            | Y          | 20/05/2015       | Kevlar          | STAYSAIL       |

|                              |             |                           |                 |                        |
|------------------------------|-------------|---------------------------|-----------------|------------------------|
| <b>MEASUREMENT INVENTORY</b> |             |                           |                 |                        |
| Measurer <b>GRE-21</b>       |             |                           |                 |                        |
| Date <b>27/08/2019</b>       |             |                           |                 |                        |
| Comment                      |             |                           |                 |                        |
| <i>Id</i>                    | <i>Item</i> | <i>Weight</i>             | <i>Distance</i> | <i>VCG Description</i> |
| <i>Id</i>                    | <i>Item</i> | <i>Maker</i>              | <i>Model</i>    |                        |
| 1                            | Engine      | YANMAR                    | 3YM30(C)        |                        |
| <i>Id</i>                    | <i>Item</i> | <i>Weight Description</i> |                 |                        |

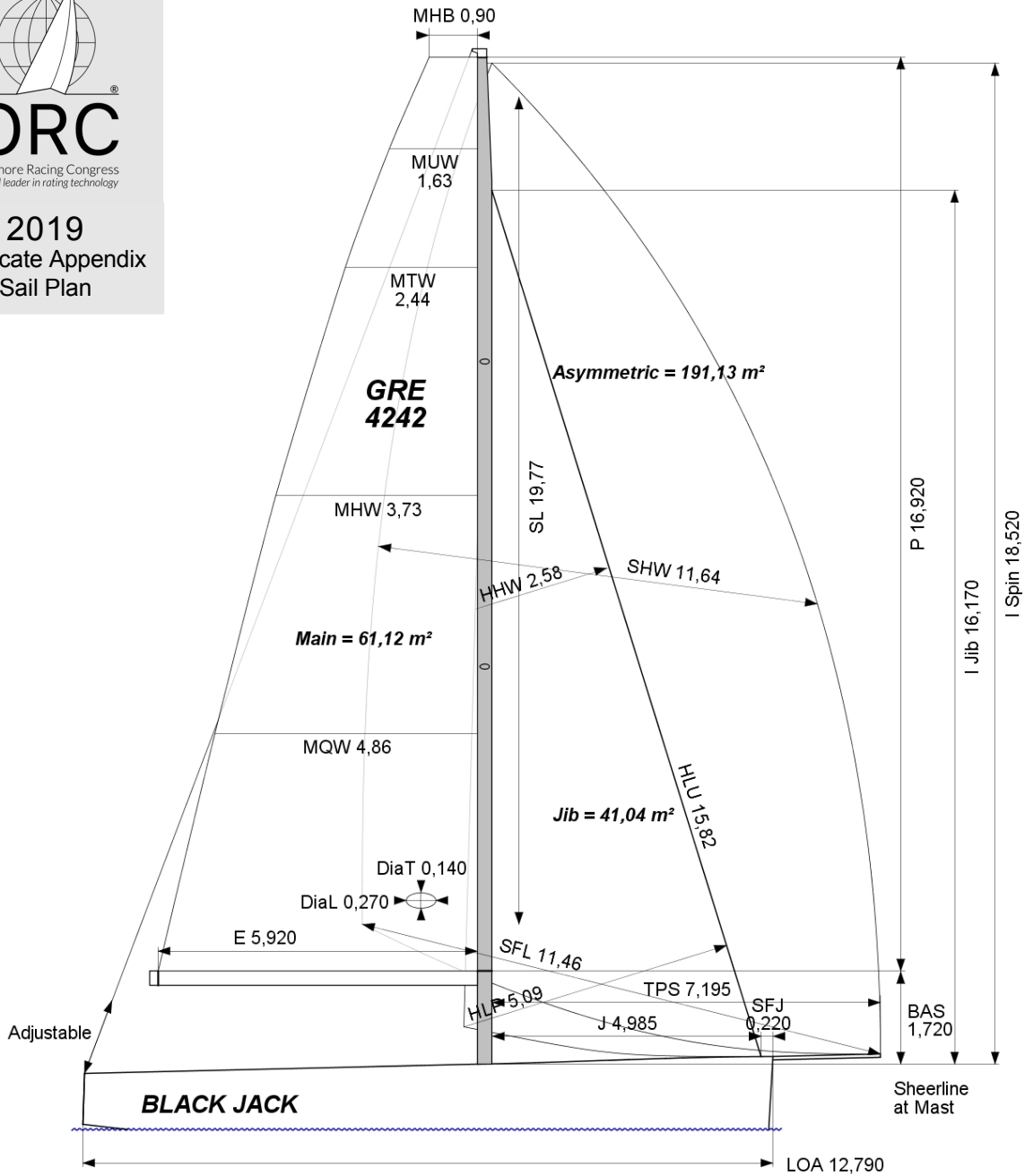
|                              |             |                 |                  |                        |              |            |               |                            |  |
|------------------------------|-------------|-----------------|------------------|------------------------|--------------|------------|---------------|----------------------------|--|
| <b>MEASUREMENT INVENTORY</b> |             |                 |                  |                        |              |            |               |                            |  |
| <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>         |  |
| 1                            | Tank        | FUEL            | INOX             | 68.0                   | 8.30         |            |               | 40-0 Dimensions: (49 x 40) |  |
| 2                            | Tank        | WATER           | SOFT PVC BAG     |                        | 7.50         |            |               | 0-0                        |  |
| 3                            | Tank        | WATER           | SOFT PVC BAG     |                        | 7.50         |            |               | 0-0                        |  |
| <i>Id</i>                    | <i>Item</i> | <i>Weight</i>   | <i>Distance</i>  | <i>VCG Description</i> |              |            |               |                            |  |
| 1                            | Battery     |                 | 6.10             | 2 x 80 Ah (P & S)      |              |            |               |                            |  |
| 2                            | Battery     |                 | 6.50             | 1 x 80 Ah (C)          |              |            |               |                            |  |



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Sail Plan



**SAILS INVENTORY**

| MAINSAIL (1)              |       |       |       |       |       |        |          |            |             |             |                    |          |            |             |          |           |
|---------------------------|-------|-------|-------|-------|-------|--------|----------|------------|-------------|-------------|--------------------|----------|------------|-------------|----------|-----------|
| Id                        | MHB   | MUW   | MTW   | MHW   | MQW   | Area   | Measurer | Meas.Date  | Manufacture | Material    | Comment            |          |            |             |          |           |
| 5                         | 0.90  | 1.63  | 2.44  | 3.73  | 4.86  | 61.00  |          | 03/08/2017 | NORTH       | Carbon      | SQ TOP 3 (P=16.92, |          |            |             |          |           |
| HEADSAILS (3)             |       |       |       |       |       |        |          |            |             |             |                    |          |            |             |          |           |
| Id                        | HHB   | HUW   | HTW   | HHW   | HQW   | HLP    | HLU      | Ovrlp      | Area        | Btn         | Fly                | Measurer | Meas.Date  | Manufacture | Material | Comment   |
| 1a                        | 0.11  | 0.76  | 1.38  | 2.58  | 3.83  | 5.09   | 15.82    | 102%       | 41.04       | Y           |                    |          | 03/08/2017 | NORTH       | Carbon   | J1A (3Di) |
| 11                        | 0.08  | 0.65  | 1.27  | 2.51  | 3.70  | 4.90   | 14.40    | 98%        | 35.80       | N           | Y                  |          | 13/08/2019 | NORTH       | Technor  | SS        |
| 7                         |       |       |       |       |       | 3.29   | 11.10    | 66%        | 18.59       |             | Y                  |          | 20/05/2015 | BANKS       | Kevlar   | STAYSAIL  |
| 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  |            |             |          |           |
| 01                        | 21.56 | 17.97 | 19.77 | 11.64 | 11.46 | 191.13 | asym     |            | 03/08/2017  | NORTH       | Nylon              | A2       |            |             |          |           |