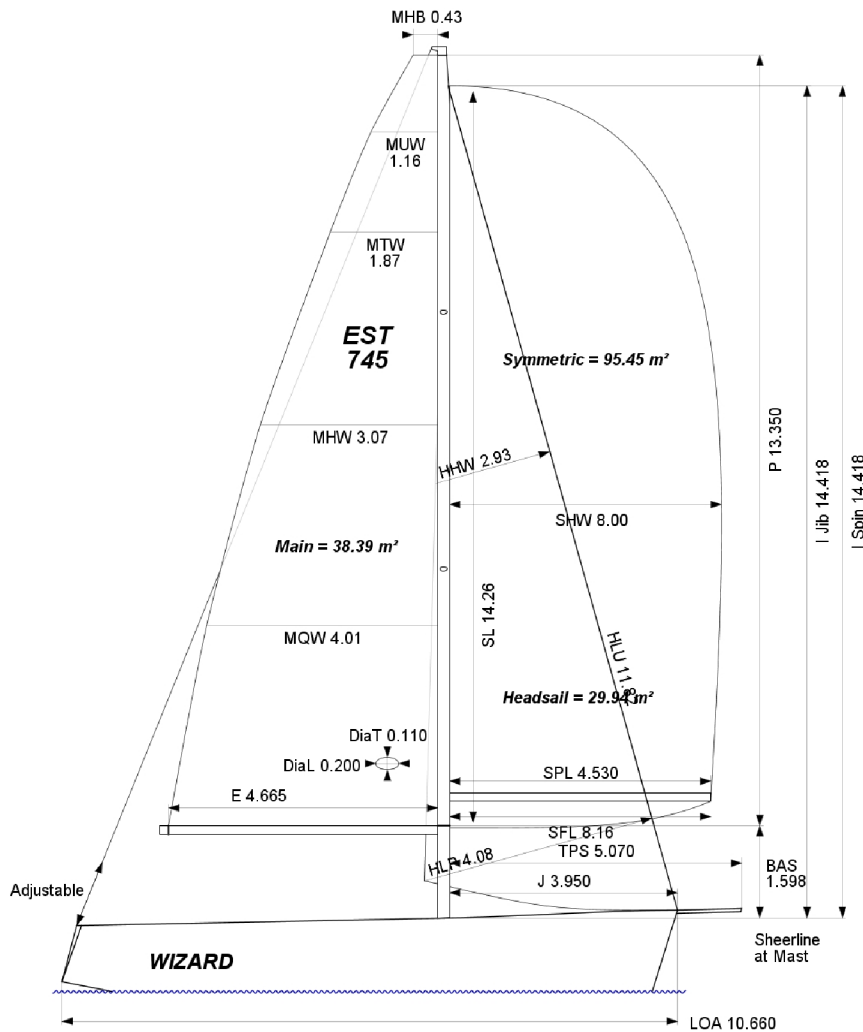




**ORC**  
Offshore Racing Congress  
World leader in rating technology

**2020**  
**ORC Club**  
**Certificate**

**Rating Office**

**Estonian Yachting Union**  
Purje 8, maja 3  
11911 Tallinn  
Estonia



**ESTONIAN**  
**YACHTING**  
**UNION**

**Certificate**

Number **152/20**  
Issued On **08/09/2020**  
ORC Ref **03880000Q02**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**

**Crew Weight**

Default 644kg  
Maximum **745kg**  
Minimum\* **559kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

ToD ToT  
Non Spin GPH **665.6 0.9014**  
Non Spin OSN **644.1 0.9316**

**Sails Limitations**

Headsails **5** Spinnakers **4**

**Spinnaker configuration**  
Symmetric: **Yes 95.45**  
Asymmetric: **No**  
Flying H/S: **No**  
Spin. Pole: **Yes**

**Class Division Length**

**CDL = 9.057**

**Stability (Measured)**

Limit Positive Stab.: **117.3°**  
Stability Index: **117.0**

| BOAT                                         |                         | GPH           |               | HULL                              |                                         |                        |  |
|----------------------------------------------|-------------------------|---------------|---------------|-----------------------------------|-----------------------------------------|------------------------|--|
| Name <b>WIZARD</b><br>Sail Nr <b>EST 745</b> |                         | <b>628.6</b>  |               | Data File <b>EST745</b>           | LOA <b>10.660m</b>                      |                        |  |
|                                              |                         |               |               | Offset File <b>F242.OFF</b>       | MB <b>3.636m</b>                        |                        |  |
|                                              |                         |               |               | Displacement <b>5,577kg</b>       | Draft <b>2.200m</b>                     |                        |  |
| CLASS                                        |                         |               |               | IMS Division <b>Cruiser/Racer</b> |                                         |                        |  |
| Class <b>First 35</b>                        |                         |               |               | Dynamic All. <b>0.196%</b>        |                                         |                        |  |
| Designer <b>Bruce Farr</b>                   |                         |               |               | Plan Review                       |                                         |                        |  |
| Builder <b>Beneteau</b>                      |                         |               |               | Construction <b>Solid</b>         |                                         |                        |  |
| Series <b>02/2009</b>                        |                         |               |               | Fiber Rigging <b>No</b>           |                                         |                        |  |
| Age Date <b>01/2010</b>                      |                         |               |               | Aramid Core <b>No</b>             |                                         |                        |  |
| Age Allowance <b>0.357%</b>                  |                         |               |               | Crew Arm Ex                       |                                         |                        |  |
|                                              |                         |               |               | Carbon Rudder <b>No</b>           |                                         |                        |  |
|                                              |                         |               |               | Light Stanchions                  |                                         |                        |  |
|                                              |                         |               |               | IMSL <b>9.703m</b>                | VCGD <b>0.128m</b>                      | Sink <b>19.17kg/mm</b> |  |
|                                              |                         |               |               | RL <b>8.425m</b>                  | VCGM <b>0.130m</b>                      | WS <b>26.03m</b>       |  |
|                                              |                         |               |               | LSM0 <b>9.545m</b>                | Displacement/Length ratio <b>6.4132</b> |                        |  |
| COMMENTS                                     |                         |               |               | Water Ballast                     |                                         |                        |  |
|                                              |                         |               |               | Trim Tab <b>No</b>                |                                         |                        |  |
|                                              |                         |               |               | BLR Index <b>0.0000</b>           |                                         |                        |  |
| PROPELLER                                    |                         |               |               | CENTERBOARD                       |                                         |                        |  |
| Installation <b>Strut</b>                    |                         |               |               |                                   |                                         |                        |  |
| Type <b>Folding 2 blades</b>                 |                         |               |               | N/A                               |                                         |                        |  |
| PRD <b>0.430</b>                             |                         |               |               |                                   |                                         |                        |  |
| PBW <b>0.120</b>                             |                         |               |               |                                   |                                         |                        |  |
| PIPA <b>0.0032</b>                           |                         |               |               |                                   |                                         |                        |  |
| SCORING OPTIONS                              |                         |               |               |                                   |                                         |                        |  |
|                                              | COASTAL / LONG DISTANCE |               |               |                                   | WINDWARD / LEEWARD                      |                        |  |
| Time on Distance                             | <b>609.7</b>            |               |               |                                   | <b>680.5</b>                            |                        |  |
| Time on Time                                 | <b>0.9841</b>           |               |               |                                   | <b>0.9920</b>                           |                        |  |
| Triple Number                                | Low                     | Medium        | High          | Low                               | Medium                                  | High                   |  |
| Time on Distance                             | <b>723.9</b>            | <b>555.4</b>  | <b>495.8</b>  | <b>935.9</b>                      | <b>683.3</b>                            | <b>593.2</b>           |  |
| Time on Time                                 | <b>0.9325</b>           | <b>1.2153</b> | <b>1.3615</b> | <b>0.7212</b>                     | <b>0.9879</b>                           | <b>1.1379</b>          |  |

BOAT

Name **WIZARD**  
File **EST745**

Sail Nr **EST 745**  
Data in **meters/kilograms**

RIG

Forestay Tension **Aft**  
Inner Stay **None Fitted**  
Carbon Mast **No**  
Fiber Rigging **No**  
Non-Circular Rigging **No**  
Articulated Bowsprit **No**

Spreaders **2**  
Runners/Checkstays **0**  
Jib Furler **No**  
Main Furler **No**

P **13.350** E **4.665** MDT1 **0.110** MW **0.200**  
IG **14.418** J **3.950** MDL1 **0.200** GO **0.220**  
ISP **14.418** SFJ **0.000** MDT2 **0.110** BD **0.160**  
BAS **1.598** SPL **4.530** MDL2 **0.156** MWT **164.00**  
FSD **0.035** TPS **5.070** TL **0.850** MCG **5.070**

INCLINING TEST AND FREEBOARDS

Inclining Test **Current Inclining**

Flotation date **26/07/2020**

SG **1.0000**

FFM **1.391** FF **1.399** SFFP **0.422**

FAM **1.082** FA **1.089** SAFF **10.320**

W1 **75.5** PD1 **630.2** WD **12.300**

W2 **75.5** PD2 **631.3** GSA **1.0**

W3 **75.5** PD3 **629.3** RSA **1.0**

W4 **75.5** PD4 **631.1** PLM **9000.0**

LCF from stem on CL / on sheer **5.827 / 6.078**

Maximum beam station from stem **6.761**

RM Measured **116.0kg·m**

RM Default **131.2kg·m**

Limit of positive stability / Stab.Index **117.3° / 117.0**

Freeboard at mast at 3.950 **1.280**

MIZZEN RIG AND SAILS

N/A

PROPELLER

Installation **Strut** PRD **0.430**

Type **Folding 2 blades** PBW **0.120**

Twin Screw **No** PIPA **0.0032**

ST1 **0.042** ST3 **0.180** ST5 **0.230**

ST2 **0.180** ST4 **0.112** EDL **2.120**

COMMENTS

MOVABLE BALLAST

N/A

CENTERBOARD

N/A

Certificate

Number **152/20**

ORC Ref **03880000Q02**

Issued On **08/09/2020**

VPP Ver. **2020 1.02**

Valid until **31/12/2020**

EJL

ESTONIAN YACHTING UNION

SAILS INVENTORY

MAINSAIL (1)

Id

MHB

MUW

MTW

MHW

MQW

Area

Measurer

Meas.Date

Manufacture

Material

Comment

2a

0.43

1.16

1.87

3.07

4.01

38.39

EST7

26/07/2020

One sail

Carbon

P 13,35

HEADSAILS (5)

Id

HHB

HUW

HTW

HHW

HQW

HLP

HLU

Ovrlp

Area

Btn

Flying

Measurer

Meas.Date

Manufacture

Material

Comment

1

0.04

0.80

1.60

2.93

3.77

4.08

11.82

103%

29.94

Inner

02/07/2019

Unknown

Staysail

J1a

0.13

0.67

1.23

2.21

3.16

4.10

13.82

104%

29.92

Y

No

EST7

26/07/2020

One Sails

Carbon

Light

3a

0.13

0.68

1.24

2.17

3.13

4.10

13.79

104%

29.68

No

EST7

26/07/2020

Onesail

Twaron

Medium

F2

0.11

0.60

1.11

2.12

3.13

4.09

13.94

104%

29.37

No

02/04/2019

WB-Sails

Carbon

HVY

0.12

0.50

0.91

1.87

2.96

4.09

13.57

104%

26.71

No

02/04/2019

WB-Sails

Carbon

SYMMETRIC SPINNAKERS (4)

Id

SLU

SLE

SL

SHW

SFL

Area

Measurer

Meas.Date

Manufacture

Material

Comment

4a

14.26

14.26

14.26

8.00

8.16

95.45

EST7

26/07/2020

OneSails

Nylon

red

1

14.20

14.20

14.20

8.00

7.77

94.13

10/04/2019

WB-Sails

Nylon

S1, white

2

14.35

14.35

14.35

7.87

7.82

94.00

10/04/2019

Quantum

Nylon

S2, pink

3

14.43

14.43

14.43

7.18

7.10

86.15

10/04/2019

North Sails

Nylon

S3, white

ASYMMETRIC SPINNAKERS (0)

Id

SLU

SLE

SL

SHW

SFL

Area

Kind

Measurer

Meas.Date

Manufacture

Material

Comment

MEASUREMENT INVENTORY

Measurer **K-H Tagu EST7**

Date **26/07/2020**

Comment

**Internal Ballast total = 0.0**

Id

Item

Weight

Distance

VCG

Description

Id

Item

Maker

Model

1

Engine

YANMAR

29HP

Id

Item

Weight

Description

MEASUREMENT INVENTORY

Id

Item

Tank Use

Tank Type

Capcty

Dist.

VCG

Condn

Description

1

Tank

FUEL

PP

75.0

8.65

5-0

2

Tank

WATER

PP

100.0

4.55

0-0

3

Tank

WATER

PP

100.0

4.55

0-0

4

Tank

HOLDING

PP

80.0

8.85

0-0

5

Tank

Boiler

25.0

4.45

0-0

Id

Item

Weight

Distance

VCG

Description

1

Battery

6.75

75Ah

2

Battery

7.95

2 x 110Ah

1

Misc

9.55

Webasto heate

2

Misc

10.00

Autopilot

© Offshore Racing Congress 2020

www.orc.org

# 2020

## ORC Club Certificate Appendix

| BOAT    |                |                    |                   |
|---------|----------------|--------------------|-------------------|
| Name    | <b>WIZARD</b>  | Certificate Number | <b>152/20</b>     |
| Sail Nr | <b>EST 745</b> | Issued On          | <b>08/09/2020</b> |

| TIME ALLOWANCES         |               |              |              |              |              |              |              |
|-------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity           | 6 kt          | 8 kt         | 10 kt        | 12 kt        | 14 kt        | 16 kt        | 20 kt        |
| Beat VMG                | <b>1084.3</b> | <b>895.2</b> | <b>785.5</b> | <b>727.5</b> | <b>709.4</b> | <b>703.8</b> | <b>695.8</b> |
| 52°                     | <b>705.5</b>  | <b>593.6</b> | <b>533.8</b> | <b>507.9</b> | <b>498.2</b> | <b>494.7</b> | <b>491.4</b> |
| 60°                     | <b>665.6</b>  | <b>564.2</b> | <b>517.1</b> | <b>495.4</b> | <b>484.6</b> | <b>480.4</b> | <b>478.3</b> |
| 75°                     | <b>637.7</b>  | <b>543.2</b> | <b>504.7</b> | <b>484.8</b> | <b>470.2</b> | <b>459.4</b> | <b>451.3</b> |
| 90°                     | <b>643.0</b>  | <b>536.4</b> | <b>494.4</b> | <b>480.1</b> | <b>464.8</b> | <b>448.8</b> | <b>424.7</b> |
| 110°                    | <b>633.2</b>  | <b>525.4</b> | <b>485.0</b> | <b>460.6</b> | <b>440.7</b> | <b>428.8</b> | <b>409.3</b> |
| 120°                    | <b>650.7</b>  | <b>535.6</b> | <b>489.5</b> | <b>463.1</b> | <b>438.3</b> | <b>416.1</b> | <b>390.5</b> |
| 135°                    | <b>717.3</b>  | <b>582.0</b> | <b>512.0</b> | <b>480.2</b> | <b>455.5</b> | <b>430.8</b> | <b>384.6</b> |
| 150°                    | <b>851.6</b>  | <b>676.2</b> | <b>570.8</b> | <b>510.4</b> | <b>481.1</b> | <b>458.2</b> | <b>413.4</b> |
| Run VMG                 | <b>983.3</b>  | <b>780.8</b> | <b>658.9</b> | <b>580.7</b> | <b>527.8</b> | <b>492.3</b> | <b>447.1</b> |
| Selected Courses        |               |              |              |              |              |              |              |
| Windward / Leeward      | <b>1033.8</b> | <b>838.0</b> | <b>722.2</b> | <b>654.1</b> | <b>618.6</b> | <b>598.0</b> | <b>571.4</b> |
| Circular Random         | <b>868.3</b>  | <b>699.8</b> | <b>609.5</b> | <b>557.4</b> | <b>525.7</b> | <b>505.1</b> | <b>479.2</b> |
| Coastal / Long Distance | <b>1028.8</b> | <b>786.0</b> | <b>650.9</b> | <b>573.7</b> | <b>535.1</b> | <b>505.3</b> | <b>457.8</b> |
| Non Spinnaker           | <b>935.4</b>  | <b>747.1</b> | <b>644.4</b> | <b>584.1</b> | <b>547.0</b> | <b>523.1</b> | <b>493.2</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>43.1°</b>  | <b>41.6°</b>  | <b>40.9°</b>  | <b>39.6°</b>  | <b>39.0°</b>  | <b>39.0°</b>  | <b>39.4°</b>  |
| Beat VMG                                          | <b>3.32</b>   | <b>4.02</b>   | <b>4.58</b>   | <b>4.95</b>   | <b>5.07</b>   | <b>5.12</b>   | <b>5.17</b>   |
| 52°                                               | <b>5.10</b>   | <b>6.06</b>   | <b>6.74</b>   | <b>7.09</b>   | <b>7.23</b>   | <b>7.28</b>   | <b>7.33</b>   |
| 60°                                               | <b>5.41</b>   | <b>6.38</b>   | <b>6.96</b>   | <b>7.27</b>   | <b>7.43</b>   | <b>7.49</b>   | <b>7.53</b>   |
| 75°                                               | <b>5.65</b>   | <b>6.63</b>   | <b>7.13</b>   | <b>7.43</b>   | <b>7.66</b>   | <b>7.84</b>   | <b>7.98</b>   |
| 90°                                               | <b>5.60</b>   | <b>6.71</b>   | <b>7.28</b>   | <b>7.50</b>   | <b>7.74</b>   | <b>8.02</b>   | <b>8.48</b>   |
| 110°                                              | <b>5.69</b>   | <b>6.85</b>   | <b>7.42</b>   | <b>7.82</b>   | <b>8.17</b>   | <b>8.40</b>   | <b>8.80</b>   |
| 120°                                              | <b>5.53</b>   | <b>6.72</b>   | <b>7.35</b>   | <b>7.77</b>   | <b>8.21</b>   | <b>8.65</b>   | <b>9.22</b>   |
| 135°                                              | <b>5.02</b>   | <b>6.19</b>   | <b>7.03</b>   | <b>7.50</b>   | <b>7.90</b>   | <b>8.36</b>   | <b>9.36</b>   |
| 150°                                              | <b>4.23</b>   | <b>5.32</b>   | <b>6.31</b>   | <b>7.05</b>   | <b>7.48</b>   | <b>7.86</b>   | <b>8.71</b>   |
| Run VMG                                           | <b>3.66</b>   | <b>4.61</b>   | <b>5.46</b>   | <b>6.20</b>   | <b>6.82</b>   | <b>7.31</b>   | <b>8.05</b>   |
| Gybe Angles                                       | <b>145.0°</b> | <b>149.0°</b> | <b>150.5°</b> | <b>157.0°</b> | <b>174.0°</b> | <b>180.0°</b> | <b>180.0°</b> |