

| | | | | | | |
|--|--|---|---|------------------------------|---------------|--|
| BOAT | | GPH | HULL | | | |
| Name X-PRIME Sail Nr RUS-7777 | | 549.3 | Length Overall 13.305m Maximum Beam 4.054m Displacement 9,759kg Draft 2.708m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.094% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension | | | |
| GENERAL | | Class XP-44 Designer JEPPESEN Builder X-YACHTS Series 01/2010, CIN DK-XYA44262F414 Age 01/2014 Age Allowance 0.292% Offset File XP44.OFF - 07/06/2011 20:28:06 Measurement by - 30/04/2016 | | | | |
| | | IMSL 12.388m | VCGD -0.083m | Sink 27.41kg/mm | | |
| | | RL 10.992m | VCGM -0.076m | WS 37.82m² | | |
| | | LSM0 12.233m | Displacement/Length ratio | | 5.3310 | |



ORC
Offshore Racing Congress
World leader in rating technology

2019
ORC International
Certificate

Rating Office

Offshore
Racing
Congress



World Leader In Rating Technology

| SCORING OPTIONS | | | | | | |
|------------------------|--------------------------------|---------------|---------------|---------------------------|---------------|---------------|
| | COASTAL / LONG DISTANCE | | | WINDWARD / LEEWARD | | |
| Time on Distance | 534.6 | | | 601.0 | | |
| Time on Time | 1.1224 | | | 1.1231 | | |
| Triple Number | Low | Medium | High | Low | Medium | High |
| Time on Distance | 625.3 | 486.9 | 439.3 | 809.2 | 600.9 | 531.8 |
| Time on Time | 1.0794 | 1.3863 | 1.5367 | 0.8342 | 1.1233 | 1.2692 |

| TIME ALLOWANCES | | | | | | | |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity | 6 kt | 8 kt | 10 kt | 12 kt | 14 kt | 16 kt | 20 kt |
| Beat VMG | 927.3 | 762.3 | 673.1 | 636.9 | 621.5 | 614.3 | 597.8 |
| 52° | 608.1 | 509.6 | 462.8 | 446.4 | 440.1 | 436.9 | 430.1 |
| 60° | 574.8 | 487.5 | 450.0 | 434.8 | 428.3 | 424.8 | 419.6 |
| 75° | 549.0 | 472.5 | 441.2 | 424.6 | 413.2 | 406.1 | 399.9 |
| 90° | 554.3 | 465.9 | 441.0 | 423.0 | 407.9 | 394.0 | 374.8 |
| 110° | 545.2 | 456.9 | 424.7 | 409.0 | 397.9 | 386.7 | 364.9 |
| 120° | 558.1 | 463.0 | 427.5 | 404.0 | 383.8 | 370.0 | 347.5 |
| 135° | 626.1 | 500.7 | 445.3 | 419.0 | 395.3 | 370.8 | 321.6 |
| 150° | 744.5 | 595.2 | 501.2 | 449.6 | 428.0 | 410.4 | 369.9 |
| Run VMG | 859.6 | 687.3 | 578.7 | 519.0 | 492.3 | 463.7 | 418.1 |

Certificate

Number **4426.6**
ORC Ref **RUS00009948**
Issued On **19/03/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight

Default **918kg**
Maximum **1,000kg**
Minimum* **750kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

| | | |
|--------------|--------------|---------------|
| | ToD | ToT |
| Double H.GPH | 559.3 | 1.0728 |
| Double H.OSN | 545.9 | 1.0991 |
| Non Spin GPH | 589.0 | 1.0187 |
| Non Spin OSN | 573.5 | 1.0461 |

| Selected Courses | | | | | | | |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Windward / Leeward | 893.5 | 724.8 | 625.9 | 578.0 | 556.9 | 539.0 | 508.0 |
| Circular Random | 752.7 | 608.8 | 532.9 | 489.9 | 464.0 | 446.6 | 421.6 |
| Coastal / Long Distance | 890.1 | 680.4 | 565.7 | 504.5 | 474.2 | 448.8 | 405.3 |
| Non Spinnaker | 825.7 | 660.5 | 570.6 | 517.5 | 484.5 | 462.6 | 434.1 |

Sails Limitations

| | |
|-----------|------------|
| Headsails | Spinnakers |
| 7 | 5 |

| 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 | 42.7° | 41.1° | 40.0° | 38.9° | 38.1° | 38.0° | 38.0° |
| Beat VMG | 3.88 | 4.72 | 5.35 | 5.65 | 5.79 | 5.86 | 6.02 |
| 52° | 5.92 | 7.06 | 7.78 | 8.07 | 8.18 | 8.24 | 8.37 |
| 60° | 6.26 | 7.39 | 8.00 | 8.28 | 8.41 | 8.47 | 8.58 |
| 75° | 6.56 | 7.62 | 8.16 | 8.48 | 8.71 | 8.86 | 9.00 |
| 90° | 6.49 | 7.73 | 8.16 | 8.51 | 8.83 | 9.14 | 9.61 |
| 110° | 6.60 | 7.88 | 8.48 | 8.80 | 9.05 | 9.31 | 9.87 |
| 120° | 6.45 | 7.77 | 8.42 | 8.91 | 9.38 | 9.73 | 10.36 |
| 135° | 5.75 | 7.19 | 8.09 | 8.59 | 9.11 | 9.71 | 11.20 |
| 150° | 4.84 | 6.05 | 7.18 | 8.01 | 8.41 | 8.77 | 9.73 |
| Run VMG | 4.19 | 5.24 | 6.22 | 6.94 | 7.31 | 7.76 | 8.61 |
| Gybe Angles | 143.2° | 145.5° | 147.4° | 151.0° | 152.0° | 175.3° | 177.4° |

Class Division Length

CDL = **11.691**

Storm Sails Areas

Heavy Weather Jib **45.07**
Storm Jib (JL=11.88) **16.70**
Storm Trysail **18.64**

Owner

| | |
|---------------------------|---------------------------------|
| BOAT | |
| Name X-PRIME | Sail Nr RUS-7777 |
| File RU7777_Xprime | Data in meters/kilograms |

| | | |
|--|------------------|-----------------------|
| INCLINING TEST AND FREEBOARDS | | |
| Inclining Test Current Inclining | | |
| Flotation date 09/06/2015 | SG 1.0250 | |
| FFM 1.450 | FF 1.450 | SFFP 0.744 |
| FAM 1.240 | FA 1.240 | SAFP 13.259 |
| W1 110.0 | PD1 205.0 | WD 5.900 |
| W2 110.0 | PD2 204.0 | GSA 1.0 |
| W3 110.0 | PD3 206.0 | RSA 1.0 |
| W4 110.0 | PD4 205.0 | PLM 9000.0 |
| LCF from stem on CL / on sheer | | 7.341 / 7.598 |
| Maximum beam station from stem | | 9.119 |
| RM Measured | | 249.3kg-m |
| RM Default | | 266.6kg-m |
| Limit of positive stability / Stab.Index | | 125.6° / 131.0 |
| Freeboard at mast at 5.270 | | 1.317 |



ORC
Offshore Racing Congress
World leader in rating technology

2019
IMS Measurement
Certificate

| | | | |
|--------------------------------|-------------------------|-------------------|----------------------------|
| RIG | | | |
| Forestay Tension Aft | Spreaders 2 | | Runners 0 |
| Inner Stay None Fitted | Carbon Mast Yes | | Jumper Struts None |
| Taper Hollows No | Fiber Rigging No | | Jib Furler No |
| Lenticular Rigging No | Main Furler No | | Without Backstay No |
| Articulated Bowsprit No | | | |
| P 17.930 | E 5.940 | MDT1 0.138 | MW 0.275 |
| IG 18.190 | J 4.970 | MDL1 0.275 | GO 0.297 |
| ISP 19.940 | SFJ 0.300 | MDT2 0.118 | BD 0.300 |
| BAS 1.800 | SPL 0.220 | MDL2 0.220 | MWT 187.00 |
| FSP 0.086 | TPS 6.350 | TL 1.100 | MCG 6.600 |

| | |
|-----------------------------|--|
| MIZZEN RIG AND SAILS | |
| N/A | |

| | | |
|------------------------------|--------------------|------------------|
| PROPELLER | | |
| Installation Strut | PRD 0.460 | |
| Type Folding 2 blades | PBW 0.115 | |
| Twin Screw No | PIPA 0.0039 | |
| ST1 0.051 | ST3 0.180 | ST5 0.270 |
| ST2 0.180 | ST4 0.112 | EDL 2.700 |

| | |
|-------------------------------|--|
| Certificate | |
| Number 4426.6 | |
| ORC Ref RUS00009948 | |
| Issued On 19/03/2019 | |
| VPP Ver. 2019 1.01 | |
| Valid until 31/12/2019 | |

| | |
|---------------------------|--|
| COMMENTS | |
| FFM= -53 m/m FAM= -25 m/m | |

| | |
|------------------------|--|
| MOVABLE BALLAST | |
| N/A | |



Invalid for racing

ORC
World Leader In Rating Technology

| | |
|--------------------|--|
| CENTERBOARD | |
| N/A | |

| | | | | | | |
|------------------------------|-------|-------|------------------------|-------|--|--|
| SAILS (Maximum Areas) | | | | | | |
| Mainsail | MHB | MUW | MTW | MHW | MQW | |
| | 0.210 | 1.28 | 2.25 | 3.80 | 4.95 | |
| | Area | | Area (r) | | Formula | |
| | 63.20 | | 64.34 | | P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB) | |
| Symmetric Not Available | | | | | | |
| Asymmetric on centerline | SLU | SLE | SL | SHW | SFL | |
| | 21.60 | 18.22 | 19.91 | 12.04 | 10.80 | |
| | Area | | AS · (SFL + 4·SHW) / 6 | | 195.65 | |

| | | | | | | | | | | | | |
|---|------------|------------|------------|------------|------------|------------|-------------|------------|------------|------------------|-----------------|--------------------------|
| 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 |
| 0.20 | 0.95 | 1.79 | 2.92 | 4.10 | 5.30 | 17.65 | 50.50 | Y | | 16/05/2017 | Carbon | |
| 0.11 | 0.72 | 1.49 | 2.75 | 4.00 | 5.28 | 18.10 | 49.15 | Y | | 22/04/2014 | Unknow | From IRC meas. in Turkey |
| 0.11 | 0.80 | 1.49 | 2.74 | 3.97 | 5.23 | 17.77 | 48.11 | Y | | 09/06/2015 | Carbon | |

| | | | |
|---|-------------|---------------|--------------------|
| MEASUREMENT INVENTORY | | | |
| Measurer 85 | | | |
| Date 09/06/2015 | | | |
| Comment SANREMO-VERY CALM-BOOM INCLINING | | | |
| <i>Id</i> | <i>Item</i> | <i>Weight</i> | <i>Distance</i> |
| <i>Id</i> | <i>Item</i> | <i>Maker</i> | <i>Model</i> |
| A | Engine | YANMAR | 54 HP |
| <i>Id</i> | <i>Item</i> | <i>Weight</i> | <i>Description</i> |

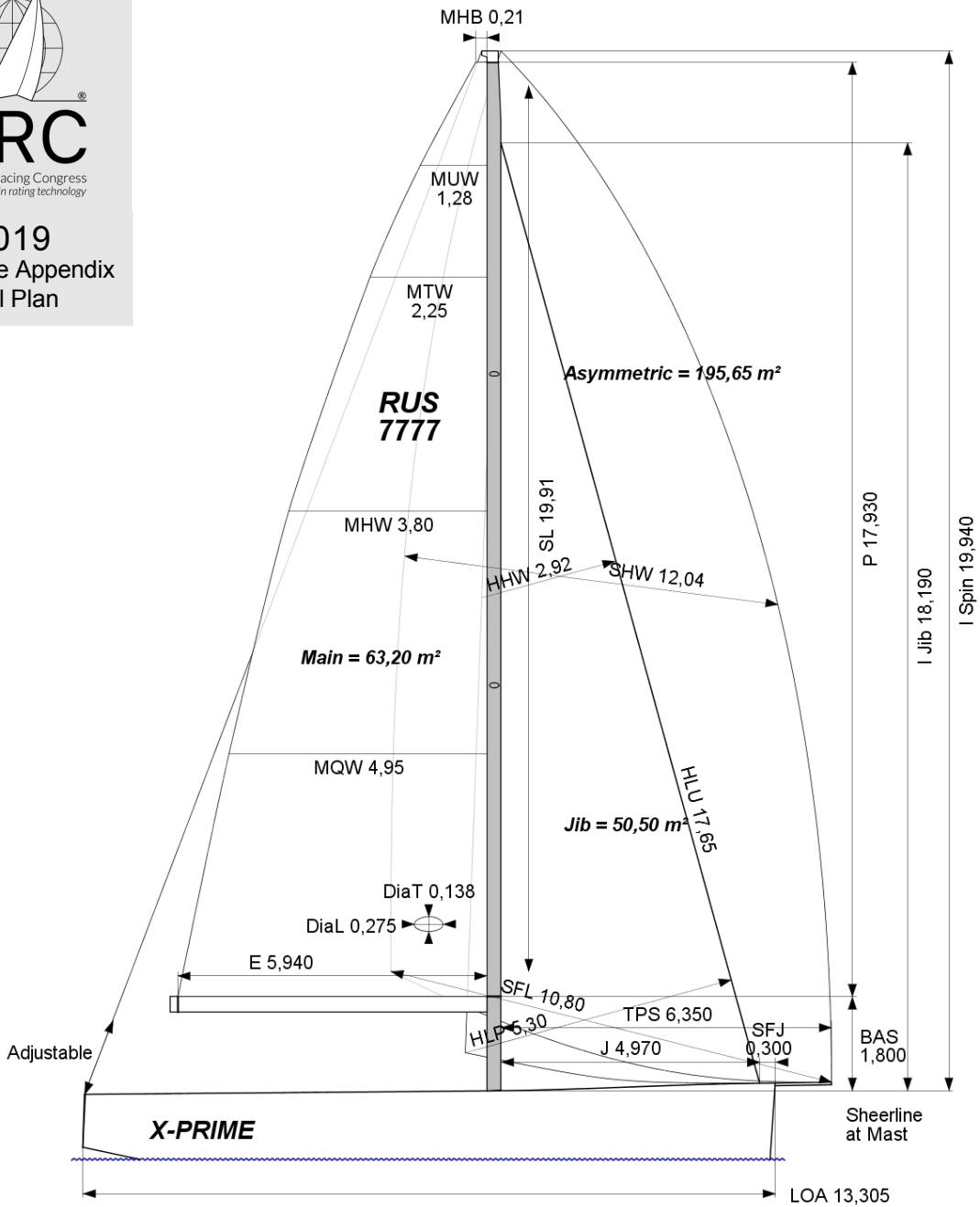
| | | | | | | | |
|------------------------------|-------------|-----------------|------------------|-------------------------------|--------------|------------|---------------|
| MEASUREMENT INVENTORY | | | | | | | |
| <i>Id</i> | <i>Item</i> | <i>Tank Use</i> | <i>Tank Type</i> | <i>Capcty</i> | <i>Dist.</i> | <i>VCG</i> | <i>Condtn</i> |
| A | Tank | H2O | PVC | 350.0 | 6.90 | 0.00 | 0-0 PORT |
| B | Tank | FUEL | ALL. | 200.0 | 5.90 | 0.00 | 0-0 STARBOARD |
| C | Tank | WASTE | PVC | 100.0 | 8.00 | | 0-0 STARBOARD |
| <i>Id</i> | <i>Item</i> | <i>Weight</i> | <i>Distance</i> | <i>VCG Description</i> | | | |
| Ballast | | | | | | | |
| A | Battery | 80.0 | 4.65 | 0.00 2x130 Amp. | | | |
| B | Battery | 25.0 | 10.00 | 0.00 1X50 Amp. | | | |
| C | Battery | 18.0 | 1.90 | 0.00 1X50 aMP. X BOW THRUSTER | | | |
| 1 | Misc | 20.0 | 9.00 | BOILER | | | |
| 2 | Misc | 10.0 | 1.60 | WINDLASS | | | |
| 3 | Misc | 50.0 | 2.10 | BOW THRUSTER RETRACTABLE | | | |
| 4 | Misc | 30.0 | 5.70 | INVERTER | | | |



ORC

Offshore Racing Congress
World leader in rating technology

2019
Certificate Appendix
Sail Plan



SAILS INVENTORY

| MAINSAIL (1) | | | | | | | | | | | | | | | | |
|---------------------------|-------|-------|-------|-------|-------|--------|----------|------------|-------------|-------------|----------|----------------|------------|-------------|----------|-------------------|
| Id | MHB | MUW | MTW | MHW | MQW | Area | Measurer | Meas.Date | Manufacture | Material | Comment | | | | | |
| DK 105 805- | 0.21 | 1.28 | 2.25 | 3.80 | 4.95 | 63.21 | | 13/10/2017 | North | Carbon | | | | | | |
| HEADSAILS (3) | | | | | | | | | | | | | | | | |
| Id | HHB | HUW | HTW | HHW | HQW | HLP | HLU | Ovrlp | Area | Btn | Fly | Measurer | Meas.Date | Manufacture | Material | Comment |
| OE#OD | 0.20 | 0.95 | 1.79 | 2.92 | 4.10 | 5.30 | 17.65 | 107% | 50.50 | Y | | | 16/05/2017 | North | Carbon | |
| J1 | 0.11 | 0.72 | 1.49 | 2.75 | 4.00 | 5.28 | 18.10 | 106% | 49.15 | Y | | | 22/04/2014 | | Unknown | From IRC meas. in |
| j2 | 0.11 | 0.80 | 1.49 | 2.74 | 3.97 | 5.23 | 17.77 | 105% | 48.11 | Y | | | 09/06/2015 | ELVSTROM | Carbon | |
| SYMMETRIC SPINNAKERS (0) | | | | | | | | | | | | | | | | |
| Id | SLU | SLE | SL | SHW | SFL | Area | Measurer | Meas.Date | Manufacture | Material | Comment | | | | | |
| ASYMMETRIC SPINNAKERS (4) | | | | | | | | | | | | | | | | |
| Id | SLU | SLE | SL | SHW | SFL | Area | Kind | Measurer | Meas.Date | Manufacture | Material | Comment | | | | |
| A2 | 21.60 | 18.22 | 19.91 | 12.04 | 10.80 | 195.65 | asym | | 18/02/2016 | North Sails | Nylon | | | | | |
| A1 | 20.80 | 18.22 | 19.51 | 11.57 | 10.59 | 184.93 | asym | | 22/04/2014 | ELVSTROM | Unknown | FROM IRC MEAS. | | | | |
| CA1 | 19.37 | 17.65 | 18.51 | 8.24 | 9.78 | 131.86 | asym | | 09/06/2015 | ELVSTROM | Unknown | | | | | |
| A0 | 19.59 | 17.60 | 18.59 | 7.65 | 10.19 | 126.42 | asym | | 01/03/2016 | North Sails | Carbon | | | | | |