



NOTICE

- ☒ Organizing Authority
- ☐ International Jury
- ☐ Race Committee
- ☐ Technical Committee

Event:

2026 ILCA 7 Men's World Championship

Organizing Authorities:

National Yacht Club

Royal St George Yacht Club

ILCA

Venue:

Dun Laoghaire, IRL

Date:

2026-06-20

Notice

N° 1

Posting time:

11:45

NOTICE TO COMPETITORS

Addition to the Notice of Race Attachment 4 (Instructions and Rules for Using the Vakaros 2 and RaceSense System) further information below:

1. GENERAL

- 1.1 The Organizing Authority will use **Vakaros Atlas 2** devices ("Devices") in conjunction with the **RaceSense** starting system throughout the duration of the event.
- 1.2 The **Vakaros Atlas 2** devices and **RaceSense** system will be used to enhance the accuracy, fairness, and efficiency of race management at this event.
- 1.3 The system provides synchronized start timing and automated identification of OCS (On-the-Course-Side) boats, helping to ensure consistent application of the Racing Rules of Sailing and improved transparency for all competitors.

2. DEVICE

- 2.1 Each boat is required to race with a working Device which can be:
 - 2.1.1 Competitor's own device; or
 - 2.1.2 Purchased from Vakaros and collected at the venue. The special ILCA discounted price (USD \$1,079) applies only to the competitors entered in the event; or
 - 2.1.3 Rented from Vakaros. Rental Devices will be available at a price of USD \$25/day, including training days. For the championship only, including the practice race, the cost is USD \$175, which includes the RaceSense Pass.
- 2.2 Each competitor shall hold a valid Vakaros RaceSense Pass for their Device, obtainable via the Vakaros website [\[click here\]](#). Rental Devices include the RaceSense Pass.
- 2.3 The Device shall be securely mounted on the pre-installed mounting platform provided with the charter boats.



- 2.4 Each competitor shall present their Device for software verification and calibration at equipment inspection.
- 2.5 Devices will be configured by the race committee to limit the display to race sequence time, heading and the boat's OCS status only. Competitors shall not modify or alter the configuration unless expressly permitted by the race committee.
- 2.6 It is the responsibility of the competitor for ensuring their Device remains properly calibrated and configured throughout the event.

- 2.7 Each competitor shall take all reasonable measures to keep the Device safe and operational and promptly notify race committee on the water or ashore of any malfunction or damage.
- 2.8 If firmware updates are required between scheduled race days, notice will be posted on the Official Notice Board.
- 2.9 Instructions for using the Device can be found here [Atlas 2 User Guide](#).
- 2.10 Competitors are responsible for ensuring their Device is properly installed, powered on, and functioning prior to leaving the shore each racing day.
- 2.11 A Device and any equipment may be inspected at any time for compliance with the rules.

3. RACESENSE SYSTEM & RULE CHANGES

- 3.1 The race committee will operate the RaceSense system as described in the sailing instructions.
- 3.2 The RaceSense countdown transmitted to each Device shall be the official time for the starting sequence. Visual starting signals displayed on the race committee boat are provided for information only. This changes RRS 26.
- 3.3 Visual identification of boats infringing RRS 30.3 or 30.4, or signalling under RRS 29.1 (if flag P is used) is replaced by electronic identification through the RaceSense system.
- 3.4 Any alleged failure of Device, the RaceSense system, or associated communication systems shall not be grounds to request redress by a boat. This changes RRS 61.1(a).
- 3.5 If the race committee signal vessel displays flag G with a long sound signal before or at the warning signal of a race, rules 3.1-3.3 above will not apply to that race and “standard” starting procedure applies to that race.

4. REGISTRATION PROCESS

- 4.1 During the equipment inspection, each boat is requested to register their Device with the Vakaros team.
- 4.2 Only registered Devices will get the timing information and be monitored by the Vakaros team.
- 4.3 Competitors can register only 1 Device per boat.
- 4.4 If a boat loses Device or it breaks on the water, the Vakaros team will be on the water to replace the Device.

5. DEVICE DISPLAY

- 5.1 While racing, the Device functionalities are restricted by the Vakaros team.
- 5.2 Competitors will only see on display:
 - 5.2.1 Colored LED lights at the top
 - 5.2.2 Boat's bearing (compass)
 - 5.2.3 Timing (time to start, and then racing time)
 - 5.2.4 OCS
- 5.3 The Device will also display the relevant text when a race is:
 - 5.3.1 Postponed
 - 5.3.2 General Recalled
 - 5.3.3 Abandoned
- 5.4 The Device will not make any sound signal.
- 5.5 All other functionalities (e.g. distance to starting line) will not be available.

6. TIMING

- 6.1 The timing information displayed on the Device is controlled by the Race Committee using the Vakaros system i.e., when the Race Committee starts the countdown, all Devices will have exactly the same countdown time.
- 6.2 The countdown can start from 6-8 minutes before the starting signal, at the discretion of the Race Committee.
- 6.3 The Race Committee is also using a Device as official timing onboard the Race Committee signal vessel.

7. COLORED LED LIGHTS

7.1 On the top of the Device' display the LED lights can show three different colours:

7.1.1 GREEN – boat is behind the starting line at the starting signal (clear start), or after RED light



7.1.2 RED – OCS at the starting signal



7.2 No colour signals will appear before the starting signal (on the display will only be seen compass bearing and time to start).

8. AFTER THE STARTING SIGNAL

8.1 When a boat is behind the starting line at the starting signal (clear start) => compass bearing and time counting up from the start + the GREEN light for a few seconds.

8.2 When a boat is over the starting line at the starting signal (OCS) => the display turns black, and white letters 'OCS' displayed on the screen (replacing compass bearing and timing) + RED light until the boat has cleared herself, or up to 4 minutes.

8.3 After a boat clears herself after the OCS, the light turns to GREEN for a few seconds and display will show again the compass bearing and time counting up (race time).

9. POSITION ON THE STARTING MARKS AND ROUNDING MARKS

9.1 Devices will be placed on both ends of the starting line:

9.1.1 When using starting vessels, the Device will be attached to the orange flag pole (approximately at the eye level of the race officer).

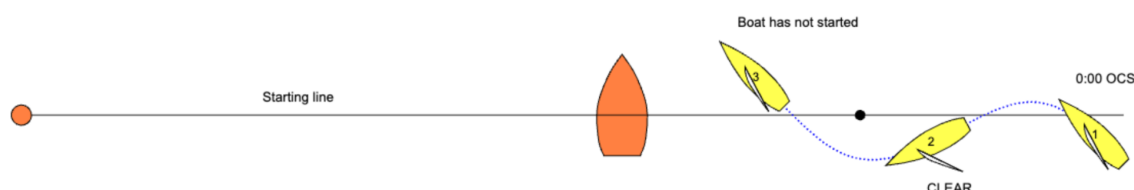
9.1.2 When using robotic marks, the Device will be placed in the center of each robotic mark.

9.2 Devices will be placed on all rounding marks.

10. SIGHTING THE LINE

10.1 Vakaros system will count as a starting line the line between the starting marks, but also its extensions. This means that if a boat is over the extension lines at the starting signal, then the Device will display OCS.

10.2 When the boat, after being OCS, comes back entirely to the pre-start side of the starting line or its extensions, the system will count her as "cleared". However, the boat has to cross the starting line (and not its extensions) to comply with the RRS definition of *Start* and *Sail the Course*.

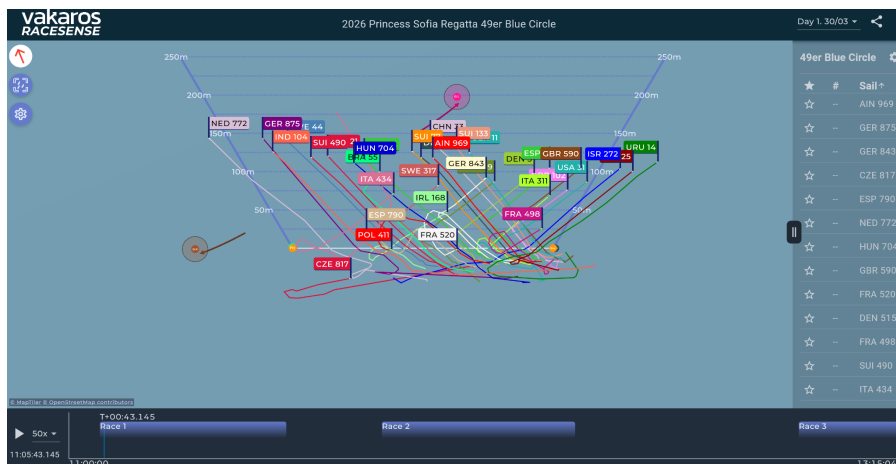


10.3 The Race Committee will need to watch such boats and make sure they started properly.

10.4 A member of the Vakaros team will also be onboard the Race Committee signal vessel and monitor the tracking live.

11. TRACKING VIEWER

- 11.1 Each race can be viewed live, or after the race is completed, using Vakaros website. This tracking is available publicly for everybody.
- 11.2 The tracking will not show in live if the boats were OCS.



- 11.3 When zooming in, boats are displayed to scale.
- 11.4 The delay for the live view is about 2-10 seconds.

12. ADVANCED LOGS

- 12.1 The jury can have an access to a report in the form of an Excel file, containing the following information:
- 12.1.1 Boats that were OCS
- 12.1.2 OCS boats that have returned completely on the pre-start side of the starting line or one of its extensions
- 12.1.3 Distance to line of each boat at the starting signal.

RaceSense Event Report			App Version: 0.10.11 (1)
Regatta	2026 Princess Sofia Regatta 49er Blue Circle		
Division	49er Blue Circle		
Regatta Start Date	2026-03-30		
Race 1			
Starts			
Start #	1		
Date	2026-03-30		
Preparatory Signal Used	P		
Start Time	11:05		
Boat Location	39.4844091, 2.7180260		
Pin Location	39.4855435, 2.7144175		
Sail Number	Bow Number	Status	DTL at Start (m)
USA 31	8	OCS (Cleared)	-1.80
IRL 168	56	OCS (Cleared)	-1.24
ITA 311	47	OCS (Cleared)	-4.17
POL 411	71	OCS (Cleared)	-5.40
ITA 434	98	OCS (Cleared)	-1.70
FRA 498	29	OCS (Cleared)	-0.10
FRA 520	35	OCS (Cleared)	-0.97
ESP 790	80	OCS (Cleared)	-0.50
DEN 3	50		--
ESP 5	11		3.00
GER 11	23		3.31
URU 14	2		11.62
GER 21	14		3.40
CHN 33	65		1.22

- 12.2 The report also shows the finishing times for every boat

Finishes						
	Sail Number	Bow Number	Total Time	Finishing Time	Max Speed (kts)	Distance Traveled (km)
1.	CHN 33	65	23:03.360	11:28:03.360	17.1	7.312
2.	SWE 44	32	23:19.509	11:28:19.509	16.1	7.551
3.	GER 11	23	24:05.851	11:29:05.851	15.6	7.588
4.	GER 875	17	24:11.422	11:29:11.422	14.2	7.470
5.	URU 14	2	24:33.339	11:29:33.339	14.9	7.676
6.	POL 64	5	24:47.678	11:29:47.678	14.5	7.604
7.	USA 31	8	25:09.513	11:30:09.513	14.8	7.691
8.	SUI 133	20	25:15.451	11:30:15.451	14.4	7.724
9.	DEN 515	44	26:04.436	11:31:04.436	14.2	8.050
10.	ITA 311	47	26:34.703	11:31:34.703	14.7	7.729

- 12.3 The Jury can also request more detailed data from the Vakaros team to investigate if there were any problems with the signal, or whether the signal was lost because sailors turned the Device off.

13. TECHNICAL INFORMATION

13.1 GPS and Sensors

- 13.1.1 Multi-constellation reception of GPS, Galileo, GLONASS, and BeiDou.
- 13.1.2 The state-of-the-art magnetic sensor is 4 times more sensitive and capable of resolving heading changes as small as 0.1°.
- 13.1.3 An advanced motion fusion algorithm and adjustable damping keep the compass steady, even in the roughest conditions.
- 13.1.4 A Device has several sensors: 3-axis magnetometer, 3-axis gyroscope, 3-axis accelerometer

13.2 Boat mapping

- 13.2.1 Vakaros has mapped each boat they are supporting. For instance, ILCA is mapped with 11 points, providing accurate representation of the boat's shape.

13.3 Data transmission

- 13.3.1 All Devices are communicating and sending data to each other, using 2.4 GHz radio signals, creating a mesh. They do not use 4G/5G data transmission.
- 13.3.2 Data is sent at a frequency of 3-10 Hz.
- 13.3.3 Each Device also connects to the main Device located on the Race Committee signal vessel, which is actually transmitting the data.
- 13.3.4 The coverage is therefore very good around the starting line and the downwind marks.

13.4 Lost connection

- 13.4.1 If a Device loses connection, it is still able to self-determine if the boat is OCS or not.
- 13.4.2 Vakaros team will be onboard the Race Committee signal vessel and will actively monitor the signal strength and the last check-in of each Device, and will alert the Race Committee in case of issues with any Device.
- 13.4.3 In case a Device lost connection before the start, the Race Committee will postpone/abandon the race.
- 13.4.4 If a Device is not re-connecting, the Race Committee will display ICS flag G with long sound signal and will not use Vakaros for that starting procedure.

13.5 Device calibration and updates

- 13.5.1 It is the competitor's responsibility to ensure their device is calibrated and remains in proper calibration throughout the event, and their Device Firmware and GPS are updated to the most recent versions.
- 13.5.2 Firmware update: <https://www.vakaros.com/en-eu/pages/racesense-resources>