

Frequently Asked Questions and Answers – Race Documentation

Rule 14 (NoR): Radio Communication / Electronic Aids, incl. Test Form

Questions about the radio communication/electronic equipment, their registration, and operation.

Answers: These aspects are discussed below, and a test form is included at the end.

VHF Radio

A VHF radio is mandatory for participants in the CAM Race. Emergency, urgency, and safety communication on the water is conducted via VHF. A combined VHF radio is recommended, which can switch between inland waterways and maritime use.

For inland waterways (max. 1 Watt transmission power), ATIS is required.

For maritime use (max. 25 Watt), an MMSI number must be programmed. To ensure communication is always possible, an emergency antenna must be on board — this also applies to the AIS. The same type of VHF antenna can be used for both VHF and AIS (same frequency band).

Note: As of January 1, 2024, the VHF channel layout has changed due to the introduction of the VDES system (VHF Data Exchange System). Some channels are no longer available for communication with bridges, locks, etc., and are now used for digital data. If your VHF radio is not yet compatible with VDES, it can be reprogrammed. The radio is considered programmed for VDES if channels 24, 25, and 26 can no longer be scanned. In that case, the radio has a VDES channel allocation. The competent authority does not require you to implement this new channel configuration.

AIS (Automatic Identification System)

An AIS transponder is mandatory for CAM Race participants. AIS is a global system for automatic identification and tracking of vessel position, course, and speed.

You are visible to other vessels you can track other vessels. Shore authorities and SAR units can monitor your vessel via AIS.

AIS may use its own antenna or share the VHF antenna. The AIS transponder must be switched on throughout the race.

Testing VHF and AIS Installations

Proper functioning depends on the equipment, connectors, antenna cable, and antenna(s). The Standing Wave Ratio (SWR) must be less than 1:2.0, replacing the “no more than 40% power loss” clause in OSR rules 3.29.2(b) and 3.29.13(b). The entire installation must be approved, and a certificate dated after January 1 of the race year must be available. This may be a truthfully completed “Test Form for Maritime Transmission/Reception Equipment”.

EPIRB (Emergency Position Indicating Radio Beacon)

An EPIRB (406 MHz, minimum category II) is mandatory. It activates manually or automatically in emergencies and transmits the programmed MMSI number. Its GPS position is transmitted via 406 MHz and determined by satellite ground stations. The alert is forwarded to national authorities to initiate a search and rescue operation. Improper use may trigger false alarms. Ensure the MMSI number matches the one registered with the RDI, and that your onboard and home phone numbers are correct. The battery expiration date must not be exceeded during the race.

Battery

Proper functioning of the (combined) VHF and AIS depends on the battery condition.

Registration

Regarding the Dutch participants, the VHF radio, AIS responder, AIS MOB, PLB, and EPIRB must be registered with the Dutch Authority for Digital Infrastructure (RDI), formerly known as the Telecom Agency. Each year, the RDI provides a 'Registration Overview'. This overview must be presented during the inspection in Lauwersoog. For other participants, the required registration from their own country are accepted.

Inland VHF registration RDI provides an ATIS code, maritime VHF registration provides an MMSI number

Combined VHF radios require both codes programmed AIS transponder and EPIRB registration also include vessel-specific MMSI numbers.

Programming of ATIS and MMSI can be done by the supplier or by the user using the User and Installation Manual. The call sign, vessel name, and vessel type (Pleasure Craft) must be programmed into the AIS transponder. MMSI programming in the EPIRB and battery replacement must be done exclusively by the supplier due to waterproofing requirements.

Operator Certificates

At least one crew member must hold a Marcom-B certificate for use of the combined VHF and EPIRB. No certificate is required for a PLB.

Dutch participants receive an annual summary of registered equipment and associated data. More information on registration and certification is available on the RDI website, including DigiD-based registration. For other participants, the required mandatory operating certificate from their own country are accepted.

Pre-Race Inspection

An RDI inspector may be present the week before the race to verify equipment registration and operator certificates. The VHF installation is approved if the "Test Form for Maritime Transmission/Reception Equipment CAM Race" is signed by a certified company. During the inspection of the items on the Equipment Checklist in Lauwersoog in the week prior to the start of the CAM Race, the signed test form must be presented along with the registration certificate issued by the competent authority, so that it can be verified whether the ATIS code and MMSI number have been assigned. Note: If the equipment fails inspection in Lauwersoog, limited time may be available for repairs.

Skipper or Person in charge:			
Name of the boat:			
Equipment Inspection Checklist	Description:	Test result:	Approved yes/no:
34	VHF Radio Type: DSC	Call Sign: 1 Watt: Correct ATIS code? Transmission power in this mode: ... W 25 Watt: correct MMSI-code? Transmission power in this mode: ... W SWR: (>1:2,0) Emergency antenna on board?	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No
35	Handheld VHF Radio	Call Sign: Correct ATIS-code? Functioning properly?	☐ Yes ☐ No ☐ Yes ☐ No
41	EPIRB 406 MHz type II	Correct MMSI code entered? Battery expiry date not passed yet? EPIRB test successful?	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No
42	AIS-transponder	Correct MMSI code entered? SWR: SWR <= 1: 2,0 AIS test successful?	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No
43	Overview of Registrations and Operating Certificates (Marcom-B)	VHF Radio Handheld VHF radio EPIRB AIS	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No
Date: - - 2026		Remarks	
Inspector:			
Signature:			

Rule 16.6 (SI) and Item 48 (Equipment Inspection Checklist): Keel/Rudder Inspection (incl. Test Form)

Question: What does the keel/rudder inspection involve, and how should I provide proof of it?

Answer: The keel/rudder inspection must have been carried out no more than two years prior to the start of the race. It is also recommended that, in the event of a grounding, the keel/hull structure is inspected.

A visual inspection of the keel/hull structure reduces the risk of losing the keel due to: damage from grounding, collision with a hard object, poor maintenance, visible material fatigue, etc.

The keel inspection must be carried out by an independent inspector. This inspector should have expertise in keel structures — for example, a yacht yard employee with sufficient experience, or a yacht owner with sufficient knowledge — but must not be the owner of the yacht being inspected.

This inspection cannot be carried out in the week prior to the race in Lauwersoog. It is the responsibility of the owner/skipper to repair any deficiencies.

What must be inspected?

Keel bolts are to be checked for corrosion and correct tension; nuts must be securely tightened.

Check for any movement in the keel/hull structure. This can be done when the yacht is suspended in the crane, with the keel clear of the ground, by applying lateral movements to the keel. The inspector should observe both the interior and exterior of the boat for any play in the structure. Inspect for signs of material fatigue. At the same time as the keel inspection, the rudder assembly should be checked for, e.g., corrosion, wear, etc.

After the inspection the following form must be completed and signed by both the inspector and the owner/skipper, and submitted during race registration at the race office in Lauwersoog.

Declaration of Completion of the Keel/Rudder Inspection

Name of the boat:		Sail Number:
This visual inspection has been carried out to identify and report any visually detectable indications that may compromise the structural integrity of the vessel's keel and rudder. It does not guarantee that the vessel is seaworthy, nor that the owner has repaired the identified issues. The inspector declares that he/she has carried out the inspection of the keel/rudder/hull structure to the best of his/her knowledge and belief. He/she has found defects / no defects.		
Inspector:	Signature:	Date:
The skipper or person in charge of the boat named: and sail number: declares that on: (date) the keel/rudder inspection was carried out and that he/she has been informed of any deficiencies.		
Name:	Signature:	Date:

Item 16 (Equipment Inspection Checklist) – Lifejackets

Question: What are the requirements for life jackets, and what and how should the life jackets be tested?

Answer: Lifejackets In the Equipment Inspection Checklist, item 16 requires that there must be one lifejacket per crew member on board, each with a minimum buoyancy of ISO 150 N. Each lifejacket must be equipped with a whistle and a lifting loop

Also there must be a light that emits a flashing signal for at least 8 hours and can be switched on manually (see the requirements of SOLAS LSA 2.2.3)

Furthermore, the lifejacket must have a crotch strap or two thigh straps. The name of the wearer or the boat must be indelibly marked on the lifejacket.

There is no official (mandatory) inspection for lifejackets. Both the OSR and SOLAS state that lifejackets should be inspected regularly, preferably annually. Normal wear and tear occur due to (intensive) use, as well as exposure to sunlight, water, and salt.

Lifejackets are activated by means of a tablet or capsule which, upon contact with water, inflates the lifejacket. These tablets or capsules have a limited shelf life and should be replaced regularly, e.g., once a year.

When inspecting the lifejacket, the CO₂ cylinder should also be checked: replace the cylinder if there is rust or damage. Each proper cylinder has the weight marked on it. If weighing shows a loss of weight, this indicates leakage and the cylinder must be replaced

These CO₂ cylinders are available separately and can be replaced by the user, as can the tablet and capsule. In the Netherlands inspection can also be carried out by a specialist company such as Georg Kniest, Kok Watersport, etc. At the KNRM, it is sometimes also possible to have lifejackets inspected.

Items 27, 28, 29 and 30 (Equipment Inspection Checklist) – Paper Charts

Question: Which charts are required to participate in the CAM Race?

Answer: The charts must be new or updated. As a substitute for the approach charts for Esbjerg, Helgoland, and the Limfjord, as well as for harbors on the southern coast of Norway, updated harbor guides such as the recent Cruising Almanac or Reeds are also acceptable, provided that the approach routes connect to the last buoy of the passage chart.

A complete set of charts for this race could include: Hydrographic Chart Waddenzee East 1812, British Admiralty Chart 1423 (Terschelling to Esbjerg), British Admiralty Chart 1422 (Esbjerg to Hansholm, incl. Offshore Oil and Gasfields), for the Skagerrak up to the southern coast of Norway: British Admiralty Chart 1402. Together with charts NO 1.2, NO 2, and DK 6, these cover the entire area.

In item 39 of the Equipment Checklist, 4 hand-held flares are required (art. 4.23 (OSR)).

Question: Is an electronic distress signal also permitted instead of the hand-held flares as prescribed in the Equipment Checklist?

Answer: The CAM Race organization permits the use of 4 electronic distress signals instead of the required red hand flares. Red hand-held flares, as prescribed by the OSR, are designed to make your position visible when the rescue boat is already on its way. They burn for at least 60 seconds and are visible up to a distance of 5 miles. This distress signal is suitable for use both during the day and at night. The Ocean Signal RescueMe EDF1 flare is such an electronic distress signal and is a relatively new and innovative product. It is a reusable hand-held signaling device that uses advanced ultra-bright LED lighting. Because no fire is involved, the RescueMe EDF1 flare is also safe to use in a life raft. In addition, the device is compact, IP67 waterproof, easy to operate, and equipped with replaceable long-life batteries (signal can be used for 6

hours). The maximum range of 7 miles with 360-degree coverage also ensures excellent visibility for rescue teams