



AMERICA'S CUP

REGATTA DIRECTOR NOTICE #6

Issued 9 July 2015

Re: Safety Document for AC45 Yacht Racing

Please find attached v1 of a document that brings the specific safety rules that apply when racing an AC45 Yacht into one document.

I hope this assists Competitors and officials in finding the relevant rules that directly apply to safety.

This document will be updated as necessary and all versions will be available on the official noticeboard, once the noticeboard is created.

Iain Murray
Regatta Director

SAFETY FOR AC45 Yacht Racing

This document is not a rule. It brings the various rules of the America’s Cup that relate specifically to safety, together into one reference document.

Please note that rules get amended and while ACRM will make best efforts to keep this manual updated, readers should refer to the source rule for final confirmation.

Each Competitor should have a manual with their team’s crisis management protocols.

This document covers times when there is racing. In times when there is not racing, each Competitor must take responsibility for their own sailing and safety arrangements as well as follow all local rules and regulations.

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1. CREW AND GUEST RACER REQUIREMENTS

CREW

From Racing Rule 1.2 - Life-Saving Equipment and Personal Flotation Devices

A *yacht* shall carry adequate life-saving equipment for all persons on board. Crew equipment requirements in these Racing Rules prescribe the minimum required. Each competitor is individually responsible for wearing personal equipment adequate for the conditions.

From Racing Rule 1.3 - First Aid Training

While racing, a yacht must have on board at least two crewmembers who have completed a recognized First Aid / CPR course as determined by the Regatta Director.

From Racing Rule 40:

- **Personal flotation:** a buoyancy aid that meets the flotation standard of ISO 12402-5 or ISO 12402-6 (CE 50 Newtons) and that is capable of being removed or deflated within 10 seconds, which shall be the outermost garment;
- **Helmet:** a helmet to a minimum standard of CE EN 1077, ASTM 2040, or Snell S-98 and with at least 300 square centimeters of the exterior surface a high visibility color;
- **Knife:** a cutting device with a blade length of no more than 150mm;
- Weight of clothing and equipment no more than 8.5 kg per crewmember;
- Clothing not designed to retain water for purpose of increasing weight;

GUEST RACERS / OTHER PEOPLE ON BOARD

From Protocol 44:

Each Competitor shall provide a guest racer for each of its AC45 Yachts ...unless the Regatta Director determines based on safety considerations that there shall be no guest racers in any race or races.

From Racing Rule 56:

- The Regatta Director will determine whether or not yachts shall carry a guest. The skipper of the yacht may, on grounds of safety, refuse to carry a guest. A skipper's decision to refuse to carry a guest shall be immediately communicated to the race committee via the RO Comms.
- A guest shall take no part in sailing the *yacht* and shall remain aft of the rear beam with at least one hand on at least one guest handle
- A guest shall wear a personal flotation device and helmet that complies with rule 40. This equipment and the clothing worn by the guest shall look the same as that of the crew.
- The weight of the guest shall not exceed 100kg (fully clothed)

From Racing Rule 57:

The Regatta Director may provide for the carrying of a person on a *yacht* on terms and conditions specified in the sailing instructions. The skipper of the *yacht* may, on grounds of safety, refuse to carry this person. A skipper's decision to refuse to carry this person shall be immediately communicated to the race committee via the *RO Comms*.

2. AC45 YACHTS

From Racing Rule 56:

A guest shall take no part in sailing the *yacht* and shall remain aft of the rear beam with at least one hand on at least one a guest handle. Guest handles shall not be more than two meters from the centreline of the *yacht*.

From AC45 Class Rule C.4.2:

The *yacht* shall be equipped with no less than two righting lines, one attached to the inner side of each **hull** at the padeye immediately aft of the forward crossbeam. Each line shall at least be long enough to extend from the padeye to the approximate centerline of the *yacht*, and may consist of a continuous loop, or a line with a suitable loop at its working end. These lines shall be strong enough to withstand the loads associated with righting the *yacht* after a capsize. The lines may be secured to the **trampoline** on the centreline of the *yacht*, with easily breakable lashings when not in use.

From AC45 Class Rule C.4.3

Crew restraints may be fitted if approved by the **Measurement Committee**. Such restraints shall not be used for any other purpose.

3. ACTIONS OF AN AC45 YACHT WHILE RACING

From Racing Rule 41 - OUTSIDE HELP

A *yacht* shall not receive help from any outside source, except

- (a) help for the removal of an injured or ill person. Once a person has been removed from the *yacht*, that person shall not be returned or replaced;
- (b) after a collision, help from the crew of the other *yacht* or vessel to get clear;
- (c) unsolicited information from a disinterested source that is not received via electronic means, which may be another *yacht* in the same race;
- (d) communication via *RO Comms* with the Race Officer and umpires and another *yacht* in the same race;
- (e) after a capsize, help to recover the *yacht*;
- (f) satellite navigation systems used solely to ascertain the *yacht*'s position including "aiding" signals such as DGPS (differential GPS), SBAS (space-based augmentation signals), or RTK (real time kinematic) correction data.

From Racing Rule 47:

A *yacht* shall not permit any person on board to intentionally leave unless ill or injured. Except as a result of a *capsize*, a person leaving shall not be accepted back on board nor replaced during the race.

From Racing Rule 23:

If possible, a *yacht* shall avoid a *yacht* that is *capsized* or has both rudders out of the water, boats that are assisting a *yacht* that had *capsized*, a *yacht* that is anchored or aground, or is trying to help a person or vessel in danger.

4. TEAM SUPPORT BOATS

From Racing Rule 87:

- Team support boats shall:
 - (a) comply with instructions given by the Course Marshal;
 - (b) be clearly identifiable with the Competitor they support; and
 - (c) have a rescue net able to be fitted on or near the bow for the purpose of crew recovery.
- Each AC45 Yacht shall have one support boat as a rescue boat. This team rescue boat shall be available to be inside the racing area and in proximity to their *yacht* while *racing*. Except in the case of an emergency, rescue boats shall not interfere with *yachts* that are *racing*.
- Rescue boats shall not exceed twelve meters in length and three meters in height (not including whip antennae) for AC45 Yachts, unless otherwise approved by the Regatta Director.

From the ACRM on-water operations manual:

- A speed limit of 5 knots will apply in and around the race area. The purpose of the speed limit is to enhance safety for the spectator fleet and reduce the effect on race yachts. The speed limit will apply as soon as the exclusion zone is set. Flagged vessels with specific duties in the race area are exempt from the speed limit while carrying out their duties.
- Before the start: at the preparatory signal for the race, a team support boat shall be in the position on either the windward or leeward side of the start line or as instructed by the Race Committee Signal Boat. Please do not obstruct the view of the TV and press boats.
- After the start: team support boats may travel up and down the corridor to remain in touch with its race yacht. Team support boats may not leave the corridor without permission from the Race Committee Signal Boat.

5. RACE MANAGEMENT

From Racing Rule 87:

At a Louis Vuitton America's Cup World Series Regatta, the Event Organiser will supply two rescue boats that each carries a rescue swimmer, a paramedic (or an appropriate medical practitioner) and an AED device (Defibrillator).

From Protocol 32 - Wind Limits

Unless the Regatta Director considers conditions too rough in any case, all races for all Events shall be started when the approximate average true wind speed is between six (6) and twenty-five (25) knots measured as a rolling (box car) average of one hertz samples over 60 seconds using a Gill Windsonic on the race committee signal boat at approximately five and a half (5.5) meters above the water."

6. EMERGENCY PROCEDURES

From the ACRM on-water operations manual:

If an emergency response is required, please report to the signal boat immediately on UHF channel 16 (emergency channel).

The Race Committee Signal Boat will require the following:

- Station calling
- Nature of incident
- Your position

The Race Committee Signal Boat will then:

- Acknowledge the caller
- Confirm the incident

Injury on Race Yacht

- Person with the radio on board will call the Race Committee Signal Boat on UHF channel 16 (race yacht channel) or UHF channel 16 (emergency channel).
- Nature and severity of injury
- Your position
- What assistance, if any, is required

Race Committee Signal Boat Response

- If assistance is required, the Race Committee Signal Boat will request the medical boat to go to the location of the race yacht and/or team support boat
 - If possible, injured person should be transferred from race yacht to team support boat.
- The medical boat will stand by the race yacht and/or team support boat ready to receive the injured person.

Team Support Boat Response

- The team support boat will transfer the injured person to the medical boat then advise the signal boat of the action to be taken (e.g. injured person can be treated in five minutes or evacuation required and injured person will not be returned to race yacht)
 - If evacuation is required, medical boat will drop off injured person at nearest emergency drop zone as per the event emergency plan

Race Yacht Capsize or Collision

- Team support boats are responsible for righting their race yacht.
- Person with the radio on board the race yacht or the team support boat shall call the Race Committee Signal Boat on UHF channel 16 (race yacht channel) or UHF channel 16 (emergency channel) to report on safety of all the crew members, what assistance may be required, and any injuries

Race Committee Signal Boat Response

- The Race Committee Signal Boat will be monitoring both UHF channel 16 (race yacht channel) or UHF channel 16 (emergency channel)
- The Race Committee Signal Boat will assign support boats to stand by the capsized yacht
- Team support boats shall advise signal boat if medical assistance is required
 - If medical assistance is required, the signal boat will request the medical boat to go to the location of the race yacht and/or team support boat
 - Injured person should be transferred from race yacht to team support boat
 - The medical boat will stand by the race yacht and/or team support boat ready to receive the injured person

If evacuation is required, medical boat will drop off injured person at the nearest emergency drop zone as per the event emergency plan