

SCHEDULE 1

SPECIAL REGULATIONS

These special regulations are required by the race in terms of the NOR and are in addition to what may be required by SAMSA in terms of the legal requirement.

1. Sail Numbers

Sail numbers, as allocated to the boat by her National Authority of Class Association, shall be carried on mainsails, spinnakers and all overlapping headsails and comply with the provisions of RRS – Appendix G.

2. Electronic aids, radio transmissions and reception

There is no restriction on the type and usage of electronic aids carried aboard.

3. Self-steering devices

Automatic steering by mechanical or electronic means or by wind vanes, will be allowed.

4. Use of engine

4.1. No engine may be used for propulsion during the race. Any engine connected to the propeller shaft shall be fitted with an orthodox clutch or neutral gear so that when so used, power is not transmitted to the propeller shaft.

4.2. If the engine is run in gear for the purpose of picking up a man overboard, for rendering assistance or for any other reason, the circumstances shall be reported in the Race Declaration.

5. Skippers responsibility

5.1. The safety of a boat and her crew is the sole and inescapable responsibility of the skipper, who must ensure that the boat is fully found, thoroughly seaworthy and manned by a competent skipper and an experienced crew who are physically fit to face bad weather. He/she must be satisfied as to the soundness of the hull, spares, rigging, sails and all gear. He/she must ensure that all emergency and safety equipment is properly maintained and stowed and that the crew know where it is kept and how it is to be used.

5.2. Neither the establishment of these special regulations, their use by the race organisers, nor the inspection of a boat under these regulations in any way limits or reduced the complete and unlimited responsibility of the skipper.

5.3. It is the sole and exclusive responsibility of the skipper to decide whether or not to start or continue to race.

6. Basic standards

6.1. All required equipment shall function properly, be readily accessible and be of a type, size and capacity suitable and adequate for the intended use and size of the boat.

- 6.2. Boats shall be strongly built, watertight and, particularly with regard to hulls, decks, cockpits and cabin trunks, be capable of withstanding solid water and knockdowns. They must be properly rigged and ballasted, be fully seaworthy and must meet the standards set forth herein. "Properly Rigged" means, amongst other things, that shrouds shall never be disconnected.
- 6.3. Inboard engine installations shall be such that the engine, when running, can be securely covered and that the exhaust and fuel supply systems are securely installed and adequately protected from the effects of heavy weather.
- 6.4. When an electric starter is the only provision for starting the engine, a separate battery shall be carried, the primary purpose of which is to start the engine.
- 6.5. All heavy items, including inside ballast and internal fittings (such as batteries, stoves, gas bottles, tanks, engines, outboard motors etc.) and anchors and chains shall be securely fastened so as to remain in position should the boat capsize 180°.
- 6.6. Boat equipment and fittings shall be securely fastened against a capsize.
- 6.7. Sheet winches shall be mounted in such a way that no operator is required to be substantially below deck.
- 6.8. Monohull boats shall be self-righting.
- 6.9. Multihull boats:
- 6.9.1. Every multihull boat shall be provided with sufficient positive buoyance to support herself, with crew and stores, when in a waterlogged condition, with a minimum of 5% of the hulls above the water surface;
 - 6.9.2. It is recommended that all hulls containing living accommodation have a watertight bulkhead at a distance of between 5% and 15% of the LWL, behind the forward perpendicular;
 - 6.9.3. In the event of a capsize a multihull boat must float high enough to provide room inside for the crew to survive. The buoyancy to meet this requirement shall be by means of sealed watertight compartments for the hulls and decks or by means of foam or other approved buoyancy material;
 - 6.9.4. The solid under bridge deck or underside of wing of multihull boats shall be painted a highly visible colour (orange is recommended);
 - 6.9.5. Each hull which contains accommodation shall have at least two means of exit, or a watertight escape hatch fitted to the underside of the bridge deck.

7. Structural features

7.1. Watertight integrity:

- 7.1.1. The hull, including deck, coach roof, windows, cockpit, hatches and all other parts, shall form an integral, essentially watertight unit and any openings in it shall be capable of being immediately secured to maintain the integrity. Centreboard and dagger board trunks shall not open into the interior of the

hull. Running rigging and control lines shall not compromise this watertight unit.

- 7.1.2. No hatches forward of the maximum beam shall open inwards excepting ports having an area of less than 0.071m². Hatches shall be so arranged as to be above water when the hull is heeled 90°. All hatches shall be fitted so that they can be closed immediately and will remain firmly shut in a 180° capsize.
- 7.1.3. If extended below main deck level, cockpit companionways must be capable of being blocked off to the level of the local sheer line when the blocking arrangements are in place. This companionway or hatch shall continue to give access to the interior of the hull.
- 7.1.4. The main companionway hatch shall be fitted with a strong securing arrangement which shall be capable of being operated from above and below, including when the boat is inverted.
- 7.1.5. All blocking arrangements (e.g. washboards) shall be capable of being secured in position with the hatch open or shut and shall be secured to the boat by lanyard or other mechanical means to prevent their being lost overboard and permit exit in the event of inversion.
- 7.1.6. For boats where the cockpit is open aft to the sea, the lower edge of the companionway shall not be below main deck level at the local sheer line.

8. Lifelines, stanchions, pulpits and toe rails

- 8.1. All lifelines shall be stranded stainless steel wire of a suitable strength or material of equivalent strength, passing through or inboard of the centre-line of all supporting stanchions and pulpits. A taut lanyard of synthetic rope may be used to secure lifeline ends provided that its length when secured does not exceed 150mm.
- 8.2. Stanchions shall not be angled from the point of their attachment to the hull at more than 10° from vertical throughout their length.
- 8.3. Lifelines need not be affixed to the bow pulpit if they terminate at, or pass through, adequately braced stanchions at 600mm above the working deck, set inside and overlapping the bow pulpit, provided that the gap between the upper lifeline and the bow pulpit does not exceed 150mm.
- 8.4. Pulpits and stanchions shall be through-bolted or welded, and the bases thereof shall not be further inboard from the edge of the working deck than 5% of B max or 150mm, whichever is greater.
- 8.5. Monohull boats
 - 8.5.1. Taut double lifelines shall be permanently fitted with upper lifelines of wire at a height of not less than 560mm above the working deck arrange so that no vertical opening between upper lifelines and the working deck is greater than 380mm (age date 1/1992 and later) to be permanently supported at intervals

of not more than 2.15m. When the cockpit opens aft to the sea, additional lifelines must be fitted so that no opening is greater in height than 380mm.

- 8.5.2. Fixed bow pulpit (forward of headstay) and stem pulpit (unless lifelines are arranged as to adequately substitute for a stem pulpit) shall be permanently fitted. Lower lifelines must extend through the pulpit if there is no lower rail. Upper rails of pulpits shall be at not less height above working deck than upper lifelines. Upper rails in bow pulpits shall be securely closed while racing.
 - 8.5.3. Any lifeline attachment point will be considered as a stanchion in so far as its base shall not be situated outboard of the working deck.
 - 8.5.4. A toe rail of not less than 25mm in height shall be permanently fitted around the deck forward of the mast, except in way of fittings. The location shall not be further inboard from the edge of the working deck than one-third of the local beam. A third lifeline, at a height of not less than 25mm of more than 50mm above the working deck will be accepted in place of a toe rail. In boats built before January 1981, a toe rail of 20mm will be accepted.
- 8.6. Multihull boats:
- 8.6.1. A pulpit (forward guardrail) having a minimum height above local deck of 560mm shall be fitted to the bow of each hull (save where such foredeck is never used in the handling of any sail or pole). A suitable continuation of such pulpit shall be fitted also at the forestay (unless no headsail is ever set). Such bow pulpit shall be deemed to comply if fitted in line athwart the forestay. Multihull pulpits, push-pits and lifelines are difficult to prescribe due to the wide variety of different multihull designs. An inspector shall satisfy himself that the arrangement is safe and practical.
 - 8.6.2. Taut double lifelines with the upper lifeline not less than 560mm above the deck shall be permanently fitted. The space between lifelines shall not exceed 380mm. Stanchion distances apart shall not exceed 2.15m.
 - 8.6.3. Undecked areas enclosed by guardrails and/or lifelines shall be fitted with a safety net.
 - 8.6.4. Adequate hand holds shall be provided about the deck area. At least two stout ropes to be carried beneath the wing structure, one close to each side of the boat and each to be bent (not spliced) onto a secure anchorage at each end of the wing structure.

9. Jack-stays

- 9.1. Jack-stays shall be fitted on deck, port and starboard of the boat's centre line to provide secure attachment for safety harnesses. Jack-stays shall comprise stainless steel 1x19 wire of minimum diameter 5mm or webbing of equivalent strength (2140 kgm / 4500 lbf breaking strain is recommended). Any stitching on webbing jack-stays must not have deteriorated.
- 9.2. Jack-stays shall be attached to through-bolted or welded plates, or other suitable and strong anchorages. The jack-stays shall, if possible, be fitted in such a way

that a crew member, when clipped on, can move from a cockpit to the forward end of the boat and to the after end of the main deck without unclipping the harness. If the deck layout renders this impossible, alternative arrangements may be made to ensure that a crew member can move as described with a minimum of clipping operations.

- 9.3. A crew member shall be able to clip on before coming on deck, unclip after going below and remain clipped on while moving laterally across the boat on the foredeck, the afterdeck and amidships. If necessary, additional jack-stays and/or through-bolted or welded anchorages shall be provided for this purpose.
- 9.4. Through-bolted or welded anchorage points, or other suitable and strong anchorage for safety harnesses, shall be provided adjacent to stations such as the helm, sheet winches and masts, where crew members work for long periods.

10. Accommodation

- 10.1. A marine type toilet shall be permanently and securely installed and plumbed into the boat.
- 10.2. Bunks shall be securely installed.
- 10.3. A cooking stove shall be permanently and securely installed against a capsize, with a safe accessible fuel shut-off control capable of being safely operated in a seaway.
- 10.4. Permanently fitted Galley facilities, including sink, shall be provided.
- 10.5. Water tanks and containers:
 - 10.5.1. Water tanks, if fitted, shall be securely installed and shall be capable of dividing the water supply into at least two containers so that, at the start of the race, not more than two-thirds of the water supply is in one tank.
 - 10.5.2. A minimum of 2 litres of water per crew member per day, calculated for a period of not less than 15 days, shall be carried in at least two separate containers.

11. General equipment

The following general equipment shall be carried on board:

- 11.1. At least 2 fire extinguishers of suitable size and approved type, readily accessible, in suitable and different parts of the board.
- 11.2. One fire blanket within reach of the galley.
- 11.3. Bilge pumps:
 - 11.3.1. Monohull boats are required to be equipped with 2 bilge pumps manually operated, securely fitted to the boat's structure, one operable above and the other below deck. Each pump shall be capable of being operated with all cockpit seats, hatches and companionway shut.

- 11.3.2. Multihull boats are required to be equipped with 2 bilge pumps, manually operated. One shall be securely fitted to the boat's structure and be capable of being operated with all cockpit seats, hatches and companionway shut, pumping through permanently fixed reinforced hoses or pipes on any hull which is not substantially filled with buoyancy material or divided into a series of watertight compartments. The other shall be portable with which any watertight compartment can be dried.
- 11.3.3. Bilge pumps fitted to the boat's structure shall be provided with permanently fitted discharge pipes.
- 11.3.4. No bilge pumps may discharge into a cockpit unless that cockpit opens aft to the sea. Bilge pumps shall not be connected to cockpit drains.
- 11.3.5. Unless permanently fitted, each bilge pump handle shall be provided with a lanyard permanently attached to the boat to prevent accidental loss.
- 11.4. Two buckets of suitable stout construction each with at least 9 litres capacity, each with lanyard attached.
- 11.5. Two suitable anchors complete with chains and warps, comprising one chain of 10m plus 50m of rope or chain and one chain of 2m plus 40m of rope or chain.
- 11.6. Two flashlights, one of which is suitable for signalling, watertight with spare batteries and bulbs.
- 11.7. A suitable first aid outfit packed in a waterproof container clearly marked with the words "First Aid" shall be carried. A list of contents and instructions for their use should be affixed to the inside of the lid of the container. At least 2 members of the crew shall be familiar with the management of medical emergencies that may occur at sea and radio communications operations for obtaining medical advice by radio and other means.
- 11.8. A foghorn.
- 11.9. Radar reflector: If the reflector is octahedral, it must have a minimum diagonal measurement of 460mm or, if not octahedral, must have an "equivalent echoing area" of not less than 10m². The minimum effective height above water is 4m.
- 11.10. International code flags C, N, Q, V and W and a St Helena Courtesy Flag/Red Duster

12. Navigation equipment

- 12.1. Marine magnetic compass properly installed and adjusted (where applicable), and swung for deviation, together with a deviation card.
- 12.2. Spare compass.
- 12.3. Traditional navigation charts, Light List and "International Regulations for Preventing Collisions at Sea (1972)".

- 12.4. Sextant, navigation tables or, alternatively, 2 suitable electronic position fixing devices, one of which shall have a power source independent of the ship's power and an accurate timepiece.
- 12.5. Barometer.
- 12.6. Depth recorder.
- 12.7. Distance measuring instrument.
- 12.8. Navigation lights shall be shown as required by the "International Regulations for Preventing Collisions at Sea". Navigation lights shall not be mounted below deck level. Spare bulbs for navigation lights shall be carried.

13. Emergency equipment

The following minimum emergency equipment shall be carried on board:

- 13.1. Emergency navigation lights and power source.
- 13.2. One storm jib which shall not have an area greater than 5% of the height of the fore triangle (IG) squared and the maximum luff length of which shall not exceed 65% height of the fore-triangle. It shall be of suitable strength for the purpose. Appropriate sheeting positions on deck must be provided for this sail. Aromatic polyamide, carbon fibre and other high modulus fibres shall not be used in the storm jib. Any storm jib, if designed for a luff groove device, shall have an alternative method of attachment to the stay or wire luff.
- 13.3. Mainsails shall be capable of being slab-reefed to 35% of area in case of gear failure, or alternatively, a tri-sail shall be carried.
- 13.4. No mast shall have fewer than two halyards each capable of hoisting a sail.
- 13.5. Every boat shall have an emergency system of steering, to the satisfaction of the Race Committee. Crews must be aware of alternative methods of steering the boat in the event of total rudder failure in any sea condition. A scrutineer may require that this method be demonstrated.
- 13.6. An emergency/spare tiller shall be carried as appropriate.
- 13.7. Tools and spare parts including adequate means of disconnection or severing the rigging from the hull in the case of need.
- 13.8. Soft wood, rubber or synthetic material plugs, tapered and of various sizes, shall be available for all sizes of hull openings.
- 13.9. The boat's name shall be indelibly marked on all buoyant equipment such as life-rings, oars, cushions, etc.
- 13.10. Marine radio transmitter and receiver:
 - 13.10.1. A satellite telephone with sufficient airtime for the voyage capable of sending daily positions and updates;

- 13.10.2. A fixed fitted DSC Enabled VHF Transceiver with appropriate channels. (If the regular VHF antenna depends upon the mast, an emergency antenna must be provided);
- 13.10.3. An Emergency Position Indicating Radio Beacon (EPIRB) transmitting on 406 MHz.
- 13.10.4. A fitted AIS Transponder system.
- 13.10.5. A handheld VHF to be carried in addition to the fixed ship's VHF Radio.

14. Safety Equipment

The following safety equipment shall be carried on board and shall be indelibly marked with the boat's name or identification number:

- 14.1. One approved life jacket for each crew member. Each life jacket shall have a whistle attached to it.
- 14.2. One AIS PLB (Personal Locator beacon) for each member of the crew.
- 14.3. One approved safety belt (harness type) for each crew member. A crutch strap is required together with a safety line not more than 2m long with a snap hook at each end. Snap hooks are to be a type which will not capsize on a u-bolt and which can be easily released under load. Each boat may be required to demonstrate that two-thirds of the crew can be adequately attached to strong points on the boat.
- 14.4. Life raft(s), designed and used solely for the purpose of saving lives at sea, capable of carrying the entire crew and meeting the following requirements:
 - 14.4.1. Must be carried on deck (not under a dinghy) or in special stowage opening immediately to the deck containing the life raft(s) only;
 - 14.4.2. For boats built after 1 June 1984, life rafts may only be stowed under the working deck provided that:
 - 14.4.3. The stowage compartment is watertight or self-draining;
 - 14.4.4. If the stowage compartment is not watertight then the floor of the special stowage is defined as the cockpit sole;
 - 14.4.5. Life rafts packed in a valise not exceeding 40 kg may be securely stowed below deck adjacent to the companionway.
 - 14.4.6. Each life raft shall be capable of being got to the lifelines within 15 seconds.
 - 14.4.7. Each life raft must have at least two separate buoyancy compartments, each of which must be automatically inflatable and must be capable of carrying its rated capacity with one buoyancy compartment deflated.

- 14.4.8. Each life raft must have a canopy to cover the occupants.
- 14.4.9. Each life raft must have an inspection certificate that is valid for the duration of the race.
- 14.4.10. Each life raft must have the following equipment packed within the raft or appropriately secured to the raft in a special container:
- 1 x sea anchor or drogue;
 - 1 x bellows pump or other means of inflation;
 - 1 x repair kit;
 - 1 x bailer;
 - 1 x sponge;
 - 1 x knife;
 - 1 x signalling light;
 - 2 x paddles;
 - 3 x red hand-held flares;
 - 1 x buoyant rescue quoit attached to 30m of buoyant line;
 - Survival instructions.
- 14.5. Provisions for emergency water and rations to accompany raft ("grab bag").
- 14.6. Lifebuoys:
- 14.6.1. At least one lifebuoy equipped with a self-igniting light having a duration of at least 45 minutes with whistle and drogue within reach of the helmsman and ready for instant use.
- 14.6.2. At least one lifebuoy equipped as above with the addition of a pole and orange coloured flag not less than 3800mm². The pole is to be so ballasted that the flag will fly at least 1.8m above the water. The pole shall be permanently stored in position to be immediately available for launching.
- 14.6.3. Lifebuoys shall be of a highly visible colour (orange is recommended) and carried on deck in specially arranged stowage so that they are readily available, easily removable and shall not be secured by lashing.
- 14.7. Pyrotechnics distress signals:
- 14.7.1. The age of pyrotechnics shall not exceed the expiry date indicated by the manufacturer or 3 years from the date of manufacture, if not indicated by the manufacturer.
- 14.7.2. The following distress signals stowed in a waterproof container(s) are required:
- 4 x red parachute flares;
 - 4 x red hand-held flares;
 - 2 x orange smoke day signals or 1 x hand-held orange smoke day signal.
- 14.8. Heaving line 16m minimum length, floating type line readily accessible to the cockpit. One end of the line shall have a quoit ring or similar buoyant device attached which will assist in heaving the line when required.

15. Engine

15.1. Each boat shall be fitted with a permanently installed propulsion engine or a suitable arrangement approved by the scrutineer and shall carry a minimum amount of fuel in a permanently installed fuel tank. This minimum amount of fuel shall be sufficient to be able to meet charging requirements for the duration of the race and to motor at a minimum speed in knots equivalent to $1.8 \times \text{square root of LWL in metres}$ for at least 8 hours.

15.2. Shut-off valves on all fuel tanks.

16. Electrical systems

A minimum of two fitted batteries to be carried, one of which shall be enough to supply all the electrical power needs of the boat shall be fitted.