Summary

Detailed

GFS Equipment Audit Check-list

Cat 7 Requirements

20th June 2018

Rev 4

2017-2020 Blue e-Book SPECIAL REGULATIONS Part 1 for Racing Boats

2.03 GENERAL REQUIREMENTS RACE CATEGORY

2.03.1

All equipment required by these Special Regulations shall:

- (a) Function properly.
- (b) Be regularly checked, cleaned and serviced.
- (c) When not in use be stowed in conditions in which deterioration is minimised.
- (d) Be readily accessible.

(e) Be of a type, size and capacity suitable and adequate for the intended use and size of the boat.

2.03.2 Heavy Items:

(a) Ballast, tanks, ballast tanks and associated equipment shall be permanently installed.

(b) Heavy movable items including batteries, stoves, gas bottles, toolboxes, and anchors and chain shall be securely fastened.

(c) Heavy items for which fixing is not specified in these Special Regulations shall be permanently installed or securely fastened, as appropriate.

3.06 EXITS

3.06.1 MONOHULLS

Category 1 2 3 4 :

(a)

(i) Boats 8.5 m LH and longer with an Age or Series Date of 01/1995 or later shall have two exits. One exit shall be located forward of the foremost mast.

(ii) In very unusual circumstances (such as in a cat rigged boat) where structural features prevent its installation forward of the mast, an alternative location may be approved upon application to Australian Sailing provided the dimensions in 3.06.1 (c) or (d) are complied with.

Category 1 2 3 4 5 6 7 :

(b) Boats 5.5 m LH and longer of any Age Date and with enclosed cabins which carry any liquid fuel or gas below decks while racing shall have two exits as in 3.06.1(a).

3.08.8 Cockpit Drains – MULTIHULLS

The minimum drain sizes after allowance for screens shall be 20 cm2 per m3 of cockpit.

3.12 PULPITS, STANCHIONS, LIFELINES

3.12.6 Lifeline minimum diameters, required materials, specifications

(a) Where lifelines are fitted they shall be stranded stainless steel wire of minimum diameter specified in the table below. Lifelines shall be uncoated and used without close-fitting sleeving.

(b) Notwithstanding 3.12.6 (a) above, the term "uncoated" means that the wire must not be coated with any product that is moulded to the wire. The application of a loose sleeve to uncoated wire is permitted provided that air can circulate along the length of the wire between stanchions, it is regularly removed for inspection and the wire remains in good condition.

(c) Grade 316 stainless wire is recommended.

(d) A taut lanyard of synthetic rope may be used to secure lifelines provided the gap it closes does not exceed 100 mm. This lanyard shall be replaced at least annually.

(e) All wire, fittings, anchorage points, fixtures and lanyards shall comprise a lifeline enclosure system which has at all points at least the breaking strength of the required lifeline wire.

LH	Minimum Wire Diameter
Under 8.5 m	3 mm (1/8 in)
8.5 m – 13 m	4 mm (5/32 in)
over 13 m	5 mm (3/16 in)

3.20 BILGE PUMPS AND BUCKETS

3.20.6

No bilge pump may discharge into a cockpit unless the cockpit opens aft to the sea. Bilge pumps shall not be connected to cockpit drains.

3.20.7

- (a) Bilge pumps shall have a 25 mm minimum bore suction.
- (b) Bilge pumps and strum boxes shall be readily accessible for maintenance and for cleaning out debris.

3.28 HULL IDENTIFICATION

3.28.1

Boats shall have on both sides or on the transom in legible characters a minimum of 50 mm high:

- (a) The boat's name.
- (b) Its state marine authority (ie RMS Registration) number or sail number.

(c) If the boat has no state marine authority number, the sail number and the name of the club.

(d) The name of the club may be abbreviated

4.01 SAIL NUMBERS

4.01.1

Sail numbers shall be carried in accordance with RRS 77 and Appendix G.

RRS 77 IDENTIFICATION ON SAILS

A boat shall comply with the requirements of Appendix G governing class insignia, national letters and numbers on sails.

Relevant excerpts from Appendix G Appendix G1.2 Specifications

(a) National letters and sail numbers shall be in capital letters and Arabic numerals, clearly legible and of the same colour. Commercially available typefaces giving the same or better legibility than Helvetica are acceptable.

(b) The height of characters and space between adjoining characters on the same and opposite sides of the sail shall be related to the boat's overall length as follows:

Overall length	Minimum height	Minimum space
		between characters
		and from edge of
		sail
Under 3.5 m	230 mm	45 mm
3.5 m – 8.5 m	300 mm	60 mm
8.5 m – 11 m	375 mm	75 mm
Over 11 m	450 mm	90 mm

Appendix G1.3 Positioning

Class insignia, national letters and sail numbers shall be positioned as follows:

(a) Except as provided in rules G1.3(d) and G1.3(e), class insignia, national letters and sail numbers shall, if possible, be wholly above an arc whose centre is the head point and whose radius is 60% of the leech length. They shall be placed at different heights on the two sides of the sail, those on the starboard side being uppermost.

(b) The class insignia shall be placed above the national letters. If the class insignia is of such a design that two of them coincide when placed back to back on both sides of the sail, they may be so placed.

(c) National letters shall be placed above the sail number.

(d) The national letters and sail number shall be displayed on the front side of a spinnaker but may be placed on both sides. They shall be displayed wholly below an arc whose centre is the head point and whose radius is 40% of the foot median and, if possible, wholly above an arc whose radius is 60% of the foot median.

3.17 GALLEY

3.17.2

Cooking stove or heating appliance, where installed shall be securely fastened, with safe, accessible fuel shutoff control.

3.17.3

(a) Gas may only be used for cooking.

The use of petrol (or similar hydrocarbon with a flashpoint below 60 C) for lighting, cooking or heating is prohibited.

(b) Methylated spirits is acceptable for cooking.

3.17.4

(a) A sign reading "REMEMBER Turn Off Gas At Bottle" shall be displayed near any gas appliance.

(b) Boats equipped with gas systems using permanent flames, e.g. a pilot light, shall be fitted with a combustible gas detection system.

3.17.5

Disposable gas cooking canisters used inside the boat must be no more than 225 gram capacity.

3.17.6

Gas bottles, cylinders and reserve canisters shall be contained in separate ventilated and self-draining compartments where vapour can only escape overboard.

3.24.6

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.

3.24.7

A separate generator for electricity is optional. However, when a separate generator is permanently installed it shall be securely covered, and shall have permanently installed exhaust and fuel supply systems and fuel tank(s).

3.24.8

Fixed fuel tanks shall have a shut off valve or cock fitted directly to the tank outlet except when it is not possible for fuel to escape or siphon from the tank if the fuel line fractures.

3.24.9

(a) Petrol fuel tanks for inboard engines or inboard tanks for outboard engines shall be permanently installed, metal, vented to the open air, electrically grounded and have the filler positioned so that spillage and fumes cannot enter the boat.

(b) Diesel fuel tanks shall be metal or other material certified as suitable by the manufacturer.

(c) Fuel lines shall be metal, and clipped rigidly in place with a flexible connection between the fixed line and the engine, or a flexible line may be used throughout provided that the material and terminals are designed for that purpose. In the case of petrol engines the flexible fuel line shall be fire resistant and appropriately coded by the manufacturer (e.g. with a red stripe).

(d) Outboard motor remote fuel tanks and lines shall be as supplied by the manufacturer or built to a recognised national standard and branded with their mark of approval. Fuel tanks shall be secured to the deck or in a separately ventilated compartment.

(e) Petrol fuel shall not be carried below decks in portable containers.

(f) Except for permanently installed linings or liners, a flexible tank is not permitted as a fuel tank.

Portable Equipment

3.20.9

Two buckets of stout construction each with at least 8 litres capacity shall be provided. Each bucket is to have a lanyard.

3.24.10

Paddles: If not fitted with an engine, each boat 5.5 m or less shall carry a pair of oars or paddles with a minimum blade area of 0.04 m2 each.

4.04 FIRE EXTINGUISHERS

Where there is any form of auxiliary engine or naked flame, fire extinguishers readily accessible in suitable and different parts of the yacht shall be provided as follows:

4.04.2

One of a minimum 10B(E) rating of dry powder or equivalent

4.04.4

A fire blanket adjacent to every cooking device with an open flame which should be used in the first instance on cooking fat fires.

Notes:

1. More than two, or higher rating extinguishers may be required depending upon the size and layout of the boat.

2. Fire extinguishers are recommended to be inspected at least every six months. All extinguishers other than carbon dioxide have a pressure gauge indicating their state of charge, and a security seal on the trigger. They should be free of corrosion, and recharged if the seal is broken or the gauge is not in the green sector of the scale. The nozzle should be checked to ensure that it is clear. A dry chemical extinguisher should be taken from its bracket and shaken to prevent the powder inside from compacting. A carbon dioxide extinguisher needs to be checked by weight and recharged if there has been a loss of more than 10 per cent of the net weight.

3. A more thorough check by a competent person is recommended to be carried out annually and every few years when an extinguisher requires a discharge, refill, pressure test or replacement.

4.05 ANCHORS

4.05.1

(a) Anchors and ground tackle shall be carried according to Table 1.

(b) Anchors and warps shall be sized according to Table 2 or Table 3 using the lesser as a minimum. Anchors of equivalent holding power shall be acceptable.

(d) A provision for securing the bitter end of the warp to a strong point on the boat prior to deploying the anchor shall be fitted.

TABLE 1 Number of Anchors and Length of Warps

Function	Minimum Length of chain	Plus length of rope or chain
Primary Anchor	5.0m	45.0m

LOA	ANCHOR		CHAIN	WARP	Suggested Warp Size	
	Plough	Spade	Standard	Minimum	Polyethylene	Nylon
	Туре	Туре	Link	Breaking	(silver)	
	e.g. CQR	e.g.		Force		
		Danforth				
Metres	kg	size	mm	kN	mm	mm
Under 5	3.5	4S	6	4.5	8	8
Up to 6	4	8S	6	9	10	10
Up to 8	7	13S	6	9	10	10
Up to 9	9	22S	8	20	16	12
Up to 11	11	22S	8	30	20	14
Up to 13	15	40S	10	39	24	16
Up to 15	20	65S	10	39	24	16
Up to 17	25	65S	13	45	26	18
Up to 19	34	80S	13	45	26	18
Over 19 as certified by a marine engineer.						

TABLE 2 - BASED ON L.O.A.

Displacement	ANCHOR HighHolding Power		CHAIN	WARP	Suggested Warp Size	
	Plough Type e.g.CQR	Spade Type e.g. Danforth	Standard Link	Minimum Breaking Force	Polyethylene (silver)	Nylon
kg	kg	size	mm	kN	mm	mm
Less than 815	4	8S	6	9	10	10
816-2,500	7	13S	6	9	10	10
2,501-4,300	9	22S	8	20	16	12
4,301-6,550	11	22S	8	30	20	14
6,551-9,500	15	40S	10	39	24	16
9,501-13,600	20	65S	10	39	24	16
13,601-20,400	25	65S	13	45	26	18
20,401-27,200	34	80S	13	45	26	18
27,201 and over	45	80S	14	60	32	20

TABLE 3 - BASED ON DISPLACEMENT

Minimum breaking force should in no way be construed as a safe working load.

4.07 MEDICAL KIT AND MANUAL

4.07.3

Injury/Illness Chart

It is recommended that an injury/illness chart be used to help in communication over the radio or to ambulance officers on shore about what first aid treatment has been administered to an injury (See GFS Emergency Safety Card for example).

4.07.4

Boats shall carry a first aid kit containing at least the items in 4.07.9 It is recommended that boats should be equipped with a first aid kit whose contents and storage reflects the likely conditions and duration of the passage and the number of people aboard the boat.

4.07.5

Items contained in the first aid kits listed below are BASIC and it is recommended that they be increased on a pro rata basis when more than 10 crew are carried.

4.07.7

It is recommended that if there is any possibility that special medication is needed, or medication allergies exist for any crew member, that crew member should obtain medical advice before racing and provide any necessary additional medication.

4.07.9

The first aid kit shall be stored in a waterproof container(s) which shall have the contents listed so as to be visible without opening and shall contain the items listed below.

In the following list the generic product is indicated with common brand names in brackets. The quantities for each category are indicated under the category column (Refer 4.07.5). Alternate pharmaceuticals in equivalent amounts and having similar action to those stated are acceptable.

Soluble Aspirin x 20 Disposable Gloves x 10 Crepe bandages 75mm x 1.5m x 2 Non-adherent dressing or gauze (e.g. Melolin) x 2 Bandaids or equivalent roll of bandaid x 20 Normal saline 30ml x 2 Sunscreen 30+ 250ml x 1 Scissors, stainless steel x 1 CPR mask or 6 face shields

4.10 CHARTS, PILOTING EQUIPMENT AND BOOKS 4.10.3

The current "Australian Sailing Racing Rules of Sailing" and "Special Regulations Part 1" shall be provided in either electronic or hardcopy formats, *except in open boats*.

4.15 TOOLS AND SPARE PARTS

4.15.3

A sharp knife capable of cutting high modulus fibre rope, sheathed and restrained located in or near each cockpit shall be provided.

4.16 BOAT'S NAME

4.16.1

A boat's name shall be placed on miscellaneous buoyant equipment, such as lifejackets, cushions, lifebuoys, life-slings, floor boards etc.

4.16.2

Where a lifejacket is the personal equipment of a crew member it shall be marked instead to identify the owner. Preferably this should be the name of the owner and a contact telephone number.

4.17 RETROREFLECTIVE TAPE

Marine grade retroreflective material shall be fitted to lifebuoys, life-slings, liferafts and is recommended on lifejackets not required by a Standard to have such material.

5.01 LIFEJACKETS

5.01.1

Each crew member shall have one lifejacket as follows:

(i) A lifejacket complying with AS4758-2015 (minimum Level 50) or AS1512-1996 Type 1 or Type 2, or equivalent or more stringent overseas standard.

5.01.2

Each lifejacket shall be branded with the respective standard authority's mark of approval.

5.01.3

A combined lifejacket and safety harness may be used so long as it meets the respective standard for each.

5.01.4

If inflatable, lifejackets shall have a compressed gas inflation system.

5.01.5

Each inflatable lifejacket shall be checked and serviced at the intervals and using the procedures as prescribed by the manufacturer.

Note: Users of inflatable lifejackets are advised to read the maintenance instructions provided with their lifejacket and undertake more frequent checks for lifejackets that are regularly wet. The RNLI has developed a guide for servicing and maintenance of inflatable lifejacket.

5.01.6

Each lifejacket which is not an inflatable shall be checked annually for serviceability.

ADDITIONAL

GFS AND RMS MARITIME

REQUIREMENTS

Rule	Item
SI 25q	GFS Safety Card
SI 25 r	Rescue quoit, throw bag or lifebuoy (yachts over 8m)
RMS	Sound signalling device
RMS / SI 25 r	Waterproof Torch / Flashlight
GFS	Demonstrate MOB Retrieval System
GFS	Emergency Thermal Blanket in First Aid Kit

Navigation Lights

Navigation lights be displayed between sunset and sunrise, and during times of restricted visibility.

For reference, this represents basic Cat 5 night-time requirements - ie

3.23.2

Navigation lights shall be mounted so that they will not be masked by sails or the heeling of the boat.

3.23.3

Navigation lights shall not be mounted below deck level and should be at no less height than immediately under the upper lifeline.

4.04 FIRE EXTINGUISHERS – Note 3.

The e-Blue Book reads:

3. A more thorough check by a competent person is recommended to be carried out annually and every few years when an extinguisher requires a discharge, refill, pressure test or replacement.

To help clarify the above please note the following GFS Safety requirement: The annual thorough check of a fire extinguisher must be conducted by a competent person who has, as a minimum, a Certificate II qualification in Fire Protection Inspection and Testing (or its equivalent).

Man Overboard Retrieval System

International safety guidelines state that every vessel must be able to carry out manoverboard rescue.

This will be a GFS Safety requirement in time for the GFS 2020/2021 sailing season.

Please note that in the interim, although this is not an absolute requirement for the 2019/2020 sailing season, the GFS Safety Audit team will enquire with each skipper during the audit process, what options and alternatives are being considered in order to be able to meet this requirement and be able to retrieve a crew member directly from the water.

Emergency Thermal Blanket

In addition to the minimum First Aid equipment required, each yacht shall also keep an Emergency Thermal Safety Blanket on board.

Document Amendments

Rev 2 19th Sept 17	Updated Appendix G Sail Numbers, First Aid Kit, Liability Insurance
Rev 3 26 th Sept 17	Added definition to GFS section Minimum qualifications for annual check of a Fire Extinguisher by a "competent" person
Rev 4 20 th June 18	Added definition to GFS section MOB review process Addition of Emergency Thermal Blanket requirement for First Aid Kit