

Chesapeake Flotilla Wardroom

ScoutFleet 2002



Safety and Equipment Guidelines

The following Safety and Equipment Guidelines are adapted from the Offshore Racing Council Special Regulations for various Categories of sail boat races. They have been modified to provide guidance for boat and crew preparation for the Scout Fleet 2002 cruise and anticipated conditions. The overall objective is to keep the crew on the boats and the water out of the boats. Failing the first point (keep the crew on the boat for those that missed the first point), the objective is to get the crew back on the boat ASAP. This holds in all cases unless the second point (that is you can't keep the water out of the boat) is a real problem. Then the objective is to get the crew to a boat that does not have water coming in faster than it is going out or to land.

Please send all comments, questions and comments to Brian Johnson at BrianRJohn@aol.com or brian.johnson@neg.pge.com. This information and comments will be sent to the fleet for additional comments and help in finding the best solutions for specific needs.

Owner's/Ships Responsibility

- The safety of a boat and her crew is the sole responsibility of the owner, or owner's representative who must do his/her best to ensure that the boat is fully found, thoroughly seaworthy and manned by a crew with appropriate training and experience. He/she must be satisfied as to the soundness of hull, spars, rigging, sails and all gear. He/she must ensure that all safety equipment is properly maintained and stowed and that the crew know where it is kept and how it is to be used.

GENERAL REQUIREMENTS

All boats must have a current Coast Guard Inspection sticker [*a requirement for Sea Scout boats*]

Sea Scout boats over 26 feet must have a survey within the last 4 years [*a requirement for Sea Scout boats*]

All Sea Scout regulations and requirements will be followed during the trip except as required by emergency situations

All equipment required shall:-

- Function properly
- Be regularly checked, cleaned and serviced
- when not in use be stowed in conditions in which deterioration is minimized
- be readily accessible
- be of a type, size and capacity suitable and adequate for the intended use and size of the boat.

Heavy items:

heavy movable items including batteries, stoves, gas bottles, tanks, toolboxes and anchors and chain shall be securely fastened

Insurance:

- Seas Scout requirements, plus, must have insurance riders to allow coverage for the trip to NYC and back with passages along the Atlantic coast [*check with insurance carriers early as some may impose equipment requirements or surveys. If there are no additional requirements, the rider can generally be put in place quickly and at nominal cost (\$10 per week). Consider obtaining "unlimited" towing*]

insurance due to the distances the cruise takes the boats from harbors]

Crew qualifications:

- Every Ship is responsible for assuring the crew of each boat has the individual and collective skills and experience for the safe completion of a two week cruise that includes bay and ocean passages that exceed 60 miles per day
- each boat must have a crewmember that has completed the Red Cross First Responders course or equivalent
- each boat must have an additional crew member with a current CPR certification, *[CPR certification is recommended for all crew members]*

STRUCTURAL FEATURES, FIXED EQUIPMENT

Hatches & Companionways

Hatches shall be:

- permanently attached or firmly shut at all times while underway
- capable of being firmly shut immediately

Companionway hatches shall:

- be fitted with a strong securing arrangement which shall be operable from above and below *[The objective is to secure all openings and allow crew to get both in and out of the cabin. This can require an “inventive “ system of latches that allow the boat to be closed tight and allow the hatch to be opened from BOTH inside and outside. Hatches and companionways need to be secured in the closed position when weather conditions indicate, each boat must make its own determination of when this is required but most boats should consider this a requirement when sustained winds are above 25 knots or when there is a approaching squall line or thunderstorm]*

whether or not in position in the hatchway, secured to the yacht (eg by lanyard) to prevent their being lost overboard. *[Companionway hatches must not be allowed to be lost overboard in rough seas. The result can be water filling the boat, which is a violation of one of the first objective: “Keep water out of the boat”].*

Seacocks or valves shall be *permanently installed* on all through-hull openings below the waterline except integral deck scuppers, shaft log, speed indicators, depth finders and the like. *[Replacing any existing gate valve seacocks with ball valve type valves is highly recommended. If gate valves are not replaced, establish a maintenance program to regularly inspect and operate the valves including a test that the number of turns to fully operate the valve can be made without resistance.]*

Emergency Water

- at least one gallon of bottled drinking water for emergency use shall be provided for each crew member. *[Gallon containers from the supermarket work. Some can be frozen and used as the initial cooler for ice boxes]*

Bilge Pumps And Buckets

- unless *permanently installed*, each bilge pump handle shall be provided with a lanyard or catch or similar device to prevent accidental loss

The following is required:

- one permanently installed manual bilge pump operable with all cockpit seats, hatches and companionways shut
- two buckets of stout construction each with at least 2 gallons capacity. Each bucket to have a lanyard. *[note: if you need one bucket to remove water you probably need ten. Two buckets allow the loss of one in the weather or as a scout tries to get water from a moving boat. Instruct all Scouts to release the lanyard if the bucket is dragging them overboard as they try to get sea water from a moving boat to boil the live lobsters. Having a bucket drag a Scout overboard is a violation of the first objective: “Keep the crew on the boat”].*

The following is recommended:

- two *permanently installed* manual bilge pumps, one operable above, the other below deck. Each pump shall be operable with all cockpit seats, hatches and companionways shut and shall have *permanently installed* discharge pipe(s) of sufficient capacity to accommodate simultaneously both pumps

Compass

The following is required:-

- a marine magnetic compass, independent of any power supply, permanently installed.
- a spare magnetic compass independent of any power supply

Halyards.

- No mast shall have less than two halyards, each capable of hoisting a sail.

Preventor

All sailboats must have a preventor of the strength required to prevent accidental jibes on downwind and broad reaching runs. *[Boom vang with snap shackles that can be quickly attached to a solid toe rail or to a through bolted pad eye is acceptable. DO NOT attach to lifelines or lifeline stantions. They are NOT strong enough for the possible loads.]*

Engine And Fuel

The Following is required:

- a fuel tank shall be provided with a shutoff valve or a means of quickly disconnecting it from the engine.

The following are recommended

- Empty and clean all fuel tanks of water and sludge. **Many if not most of the engine problems that will be encountered will be due to water and crud that were in the fuel tanks at the beginning of the trip. This water and crud will stay below the fuel intake tube until the current is against the wind and a steep chop develops in the Delaware Bay. Then the engine will fail with very few easy ports under sail.**
- For boats with only one fixed fuel tank, carry at least 5 gallons of fuel in a separate container along with the fittings needed to connect this fuel to the engine. *[This is aimed at gas engines where a hook up to a container to bypass the main tank is relatively easy.]*
- When an electric starter is the only method for starting the engine, have a separate starting battery isolated from the house battery. If there is not an isolated starting battery, take great care to monitor battery condition at anchor and in NYC. Shore power hook ups are limited. If batteries are old or suspect, replace. **Plan on being power self sufficient in NYC.**

Marine Radio, Cellular Telephone, Navigational Position-Fixing Device

The following is required:

- A marine radio VHF transceiver with a minimum power of 25W
- a waterproof hand-held VHF transceiver.
- a radio receiver capable of receiving weather bulletins (this can be the hand-held VHF).
- an automatic position fixing device (eg GPS), a backup is recommended.
- a cellular telephone for reporting at checkpoints and emergency use.

The following is recommended:

- An emergency antenna for the VHF when the regular antenna depends upon the mast.

PORTABLE EQUIPMENT & SUPPLIES

Tool Kit: Each boat shall carry a comprehensive tool kit to deal with mechanical and electrical problems including an effective means to quickly disconnect or sever the standing rigging from the hull. *[In the case of a demasting, the boat must have a means of disconnecting the spars and other rigging that may poke a hole in the hull. The response to a demastings is a very situation based event. If there is a real threat of the spars puncturing the hull, use bolt cutters, hacksaws and drift pins with hammers to jetison the rigging. If the hull and crew safety are not at risk, retrieving all gear is proper. In all cases, be VERY sure that all lines and rigging is clear and will remain clear of the prop before engaging the engine.]*

Spare parts: Each boat shall carry spare parts for mechanical and electrical systems including spare belts, plugs, impellers, bulbs and fuses.

Soft wood plugs

The following is required:

Tapered and of a size to fit each through hull opening shall be attached near each through hull

Jackstays, Clipping Points And Safety Lines *[Jackstays are lines running from near the bow to the stern on both sides of the boat that allows the crew to clip into a safety line and go forward and aft while being continously teathered to the boat. Safety lines connect the crew to the Jackstays or other solid point on the boat such as standing rigging, pad eyes and lifelines.]*

The following is required:

- Jackstays of line, cable or webbing running the length of the boat on each side that allows crew to clip in safety harnesses and move fore and aft with the minimum of clipping and unclipping
- Jackstays shall be attached to through-bolted or welded deck plates, cleats or other suitable and strong anchorage fitted on deck, port and starboard of the boat's centerline to provide secure attachments for safety harness. *[Bow mooring cleats are often used as the fore anchorage. Depending on placement, stern cleats, toe rails or cleats near the rear of the cockpit are often used for rear anchorage.]*
- 1 x 19 wire of minimum diameter 5 mm (3/16 in), or webbing of equivalent breaking strength. (4500 lb); webbing is recommended as it presents less of an on deck footing issue

Fire extinguishers, USCG minimum with at least two, readily accessible in suitable and different parts of the boat.

Anchors, fenders, dock line and towing gear

Required:

- 1 anchor together with a suitable combination of chain and rope, all ready for immediate use
- 1 additional anchor together with a suitable combination of chain and rope, that can be made ready for use within ten minutes
- fenders, fender boards and dock lines to protect the boats in a raft of boats, at least 4 boat deep, with tidal and ferry surge. *[The latest word is we will be 2 to 3 boats deep at the barge in NYC. Fender storage issues can be reduced by deflating fenders and re-inflating when needed with a hand pump. Note that the mooring cleats on the barge will be 5 or 6 feet above the boats decks so bring extra-long lines]*
- A towing bridle of a size and construction appropriate for each boat with at least 100 feet of line.

Flashlight(s) shall be provided including:

- 2 high-intensity self-contained heavy-duty flashlight, (with at least 3 D-cell or 6 volt batteries) watertight, with spare batteries and bulbs

First aid kit and manual.

Each boat must carry a first aid kit to support common medical problems and emergencies for an extended cruise. The kit must support CPR, burns, sprains, cuts, breaks and include a first aid book. The kit should support an emergency for at least 12 hours before outside medical support is available.

Foghorn

The following is required:

- One air horn with spare canister

The following is recommended:

An additional manually operated (as in blowing) fog horn

Navigational charts: (not solely electronic) covering the entire route with details for harbors along the New Jersey coast, and chart plotting equipment.

A stowage chart: displayed in the main cabin clearly marked with the location of the principal items of safety, health and emergency equipment. *[This chart will allow quick orientation of new crew (we may be shifting a few crew between boats each day to share experiences) and reinforcing the location for all crew on a daily basis]*

Depth sounder with notification of offset and boat draft posted

EPIRB (Required)

- **for 406 MHz or an INMARSAT type "E". Beacon shall be properly registered with the appropriate authority [406 MHz EPIRBs can be rented from BoatUS. ScoutFleet 2002 has a special rate of \$35 per week].**

Liferafts

Liferafts are optional.

4.21 Lifebuoys

The following is required:

- **a lifebuoy (ring or horseshoe) ready for instant use with attached whistle and light**
- **A Lifesling ready for instant use and a means to hoist a MOB to deck. [The hoisting can be a halyard (an extra, not in use), a dedicated block and tackle or snaplinks on a boom vang or preventor that can quickly be used for retrieving a MOB]**

The following is recommended:

- lifebuoy ready for instant use, equipped with a whistle, a drogue, a self-igniting light and a pole and flag. The pole shall be either permanently extended or be capable of being fully automatically extended (not extendable by hand) in less than 20 seconds. It shall be attached to the lifebuoy with 3 m (10 ft) of floating line and is to be of a length and so ballasted that the flag will fly at least 1.8 m (6 ft) off the water.
- The lifebuoy and Lifesling be fitted with marine grade retro-reflective material

Pyrotechnic signals

All boats must carry USCG required safety equipment including flares. At least three aerial flares and 3 hand held flares must be on each boat.

The following is recommended:

SOLAS-grade emergency pyrotechnics as follows:

- 4 red parachute flares
- 4 red hand flares
- 4 white hand flares
- 2 orange smoke

(We will be working on the loan of this equipment from members of the Annapolis racing community)

Heaving Line & Cockpit Knife

- A heaving line of 50 ft - 75 ft length readily accessible to cockpit. (The "throwing sock" type is recommended by ORC).
- A strong, sharp knife, sheathed, attached by a lanyard shall readily accessible in each cockpit.

Heavy Weather Sails

All sails should be inspected, reinforced and repaired as needed. This trip will put two to three seasons usage on sails compared to the typical bay weekender. Bring sail repair tape, a sewing kit and extra sail cloth unless a large sail inventory is aboard.

The following is recommended:

- A mainsail fitted with two reef points.
- A jib of 90% or less LP for heavy weather situations. *[Note that the trip back from NYC is against the normal seasonal wind.]*

PERSONAL EQUIPMENT

Lifejacket Each crew member shall have a lifejacket with:

- a whistle
- marine grade retro-reflective material
- a lifejacket light (strobe for night sailing)

Safety Harness and Safety Lines (tethers)

- Each crew member shall have a harness, and a safety line not more than 7 feet long with a snaphook at each end (**all crew members are to be clipped in while on deck offshore and any time of heavy weather**)
- A lifejacket shall be worn by a crew member who is wearing a foul-weather suit while underway.
- A crew member's harness and lifejacket shall be compatible (the SOSPENDERS type inflatable vest with harness works very well)

Other Personal Equipment

- A foul weather suit with hood shall be provided for each crew member. A foul weather suit is clothing designed to keep the wearer dry and may be either a jacket and trousers worn together, or a single garment comprising jacket and trousers. A foul weather suit should be fitted with marine-grade retro-reflective material, and should have high-visibility colors on its upper parts and sleeve cuffs.
- A knife, one for each crew member.
- a watertight flashlight with spare batteries and bulb for each crew member *[the Mag Lights with 2 AA batteries with a lanyard work well]*
- Other equipment as specified by each ship.