

GENERAL RISK ASSESSMENT – SAFETY ON THE WATER

INTRODUCTION

1. The Flushing Sailing Club runs a variety of racing events from April to November which involves yachts of all sizes and is usually for up to 70 boats but in Falmouth week can involve 300 + boats this particular event is run under the authority of Port of Falmouth Sailing Association who provide a separate risk assessment.
2. The area used is on the South Cornish coast. Offshore races can be any distance along or from this coast covering Western Approaches, the English channel within Plymouth forecast area.
Series and Special Racing is in Falmouth and St Mawes Harbours, Helford River, Carrick Roads and Falmouth Bay.
3. This type of racing is significant for non-participants in that the same waters are used by other leisure and commercial craft, such as fishing boats, divers, cruising boat users, ferries, military and large cruising vessels. There are also areas of moored boats close to the racing areas.
4. The drafts of some of the competitor yachts taking part can be 3 metres plus and there is a wide variety of types of sailing vessels and levels of manoeuvrability. There is a risk of grounding when using enclosed waters with shelving banks and obstructions.
5. There is a risk of collision, which is always present in sailing, between participants, with other users of the waters and moored vessels. The Skippers of the boats racing are on the whole familiar with their vessels and accidents due to misjudgement should be few however there are often new crew on board who have a much lower level of experience or the boat may have a reduced number of crew. Club members are advised in particular of the sailing area and the need to keep clear of moored boats especially in the area around the start and finish line.
6. There is a risk of injury to the crews of the yachts, most notably in cases of gear breakage, collision or Man-Overboard (MOB).
7. The race area and complexity of courses means that a variety of safety measures need to be considered. The club has a Sailing Sub Committee made up of representatives from

the different classes of boat racing and members of the management committee, this committee is responsible for advising the Management committee of the club on all issues relating to boats on the water. The Management Committee meets monthly and discusses any issues that occur during the season. Committee boats are used to run the racing away from the club start when appropriate. For series and special racing the FSC Sailing Instructions plus the current Racing Rules of Sailing provide the framework of rules. The Race Officers are prepared and prepare for supervising races, all are either members or considered temporary members of the club. They usually carry out duties once a year therefore an experienced or/and qualified person is provided on the committee boat and in the operations room plus a committee member is a backup each month and responsible for supervising these arrangements and ensuring the Race Officer is available and has adequate knowledge and support.

Race Officer and Skipper Briefings occur at the beginning of the season, these discuss racing in general and draws attention to the existence of the Risk assessment in the Race Officer documentation (available on FSC website and in a folder in the Ops Room.

A post season (wash up) meeting takes place at the club to highlight any issues that occur during the season. RNLI and the Coastguard are situated nearby and could be available in emergencies. For specific events safety boats are provided on the water. The main safety cover for regular racing is provided by competitors on a mutual help basis.

8. This paper assesses the likely risks that will be encountered in the race area and defines the measures needed to reduce the risks to an acceptable level.

RACE ENTRY AND RACING RULES/YACHT SAFETY EQUIPMENT

All participants are required to complete a Race Entry form, which, along with the Sailing Instructions, remind Skippers that it is their responsibility to decide whether or not to part in a race.

All racing takes place under the ISAF rules and all participants are given a handbook containing the Sailing Instructions containing tried and tested courses for different wind conditions. Wind strength limits are decided by the Race Officer on the day.

FSC only organises keelboat racing and therefore does not offer Safety cover via a RIB, for example. Boats are required by the rules to be equipped and capable of self-rescue and also to offer assistance.

RACE AREAS

Racing takes place within the Falmouth Bay Area and near Coastal Waters (up to 25NMs) the Carrick Roads, the inner harbour, St Mawes Harbour and Helford river.

Possible Hazard

These areas are used by a wide variety of others and therefore the type of risks involved can be

complicated

Primary Counter Measures

Courses are prepared in advance giving a variety of possible areas to be used, maps of the area are provided in the Sailing Instructions (SIs) and particular hazards noted, areas which should not be entered are identified and penalties for infringement are stated.

Race Officers are instructed regarding actions to take to obtain information and therefore the areas chosen for a particular race are considered carefully at the start of each race. The Race Officer obtains as much information as possible regarding tide, shipping, weather, commercial vessel movements and alterations to navigational equipment and safety boat provision, this then informs what area is to be used by which classes of boat. Boats can have shortened courses or be finished away from the narrow channels if this is considered appropriate.

The areas which present a higher risk of collision at certain times because of peak usage by a wide variety of craft would have safety boats available to ensure priority is given as needed.

RACE TIMING

Races are run primarily on Tuesday evenings and Saturday afternoons with occasional special races on Thursday evenings and Sundays. Offshore races are run at two main weekends and the club acts as starter for other clubs on two occasions under their Sailing Instructions.

Possible Hazard

Clash with other events on the water, other users unaware of racing.

Primary Counter Measures

The times of races are well publicised through PoFSA and FSC and are for specific periods.

Races are notified in the Notice of Race produced by the club and the Sailing Instructions. Additional SIs are produced for special events and where the club is acting as starter for another club their SIs and Notice of Race (NOR) apply. There is provision in the Racing Rules of Sailing and Flushing Sailing Club (FSC) SIs for cancellation or postponement of races should the need arise. Liaison with other users of the area.

TIDAL INFORMATION

This is significant to all the race participants particularly with regard to the inner harbour and off the main headlands and shallow areas away from the deep channels. It also affects the routes boats take to gain maximum speed around a particular course.

Possible Hazard

During Spring tides there are many areas which are shallow particularly towards Truro, off St Mawes castle and along that shore, around Black Rock beacon and along the rocky shores under Pendennis.

Primary Counter Measures

Tidal Information is widely available in booklet form in the FSC club, the operations room and on the committee boat. It is also sent out to competitors and members at the start of each season. The Race Officer takes this into consideration when setting courses.

WEATHER LIMITATIONS

When the wind increases above certain levels and visibility deteriorates the quality and enjoyment of racing generally suffers well before the conditions create a major safety hazard. There are also times when there is no wind and boats could drift into hazards. Fog can also drop rapidly in the area and present considerable hazard particularly to boats with no engines. These levels vary between the standard of yacht crews and the types of boat racing.

Possible Hazard

Squalls and high winds offer high levels of risk to sailing boats and must be considered together with the types of boats likely to be on the water, and other relevant information. Also the drift of boats sent near a shore at calm times. Fog dropping suddenly must give rise to a decision which is the safer, to halt racing or continue and shorten the race as soon as possible.

Primary Counter Measures

The Race Officer will assess the conditions and their impact on race quality, enjoyment and safety with regard to postponement, abandonment or cancellation of racing also with the knowledge that a mark laying RIB on the water is not designated a safety boat and could not cover all the race areas.

The Race Officer obtains information on weather applicable to a time and area for racing. The coastguard and general sources are used for this. This affects the decision to race and there is provision in the FSC SIs and other SIs prepared, for cancellation of different classes of boats and to send them into different areas using different courses of various lengths. There is also provision to shorten racing and finish boats more quickly than originally planned keeping them away from obstructions. Safety for offshore racing is under ISAF categories and FSC Notice of Race lists safety equipment required for all competitors including radio. The Race Officer (RO) considers showing Y flag requiring the use of lifejackets and cancelling classes where a safety boat could be needed i.e. open boats. Boats sent out of sight of the committee boat are within radio contact and the RO must be assured that the boats in those fleets can cope with the conditions and assist each other. The RIB regularly available is primarily for mark laying and the expectation is that the type of boats sailing will be able to assist each other.

COLLISION

(a) Possible hazard Racing yacht and racing yacht:

Danger before countermeasures

A miscalculation of the depth of water close to the shores, the Black Rock beacon, Pendennis Headland, and the sand banks thus demanding a rapid change of course to avoid grounding.

A miscalculation of the strength of the stream near a mark, again demanding a rapid change of course.

Incorrect perception of another yachts actions. Some of the crews will be novice and not completely familiar with all the areas or with the strength of its tidal streams and the hazards

around the areas sailed. Collisions occur occasionally in yacht racing, particularly where one yacht is restricted in its movement. Therefore there is a risk of a collision between two or more racing yachts, albeit a small one.

Crews not maintaining a proper lookout. Miscalculation when approaching other moored boats in the finishing channel. Close sailing at the start of a race and at the finish in confined spaces particularly off the club

Primary Counter Measures

Most yachts taking part in these races will be helmed by experienced sailors, who not only know their own boats' performance, but also the performance of other boats taking part. They should know the International Regulations for the Prevention of Collisions at Sea (IRPCS) and rules of yacht racing and obey them. Most yachts will have as part of their crews experienced yacht sailors who know the area well. The Racing Rules of sailing for the year and the FSC SIs as may be modified by The International Regulations for Prevention of Collisions at sea (IRPCS) all of which give clear guidance regarding these areas. Tidal tables are available and competitors encouraged to use them. Courses are set with depth and tidal flow in mind during the course of the race.

Training opportunities are offered by the club and action taken if it becomes apparent that a boat is regularly sailing under crewed or if an incident occurs.

A long start line is advised and starting away from the club line is used if large numbers of boats are starting together and cannot manoeuvre easily. Also splitting the boats into different classes to reduce numbers on the start line.

A safety boat is made available to warn if there are a large number of craft racing in confined waters.

A finish line is available in open water and the provision to shorten courses away from the confined channels.

A log book recording is kept of each race and incidents are considered at the end of the year to inform plans for the following year.

b) Possible hazard Racing yacht and casual cruiser:

Danger before countermeasures

Falmouth Bay and Carrick Roads as well as the inner harbour are popular areas for sailing and it is expected that there will be boats cruising which have no particular interest in the racing. Therefore a boat casually transiting from A to B may get entwined in the racing fleet by accident; however, most cruising yachts will avoid the trauma of interfering with a racing fleet. While such boats should have knowledge of the IRPCS rules and what action to take, it is possible that not all will.

Primary Counter Measures

Competitors are responsible to maintain a good look out and take appropriate avoiding action as per IRPCS.

The inner harbour area, when used by large fleets e.g. during Flushing Village Regatta, will have a safety boat available for direction of craft.

The FSC SIs have provision for halting racing if problems are identified.

Information regarding all racing is passed to the Coastguard and Harbour authorities at the start of the season and the harbour patrol boat often oversees any racing which might affect leisure users e.g. Oyster Festival Work boat race

(c) Possible hazard; Racing yacht and commercial vessels and divers:

Danger before countermeasures

Falmouth is a port with extensive commercial, some naval and ferry traffic and is also popular with divers.

Although the ferry operators are extremely experienced and understand yacht racing they, like all commercial and other vessels are generally restricted to certain channels and deep-water channels and it is impracticable for yacht racing to avoid sharing these areas. Divers are occasionally visitors to the area and may not be aware with regard to yachts.

Primary Countermeasures

There is careful co-ordination with the pilots and Harbour Masters Office, and good communication between the different groups using the harbour.

The FSC SIs have clear instructions to competitors regarding behaviour when commercial shipping is in transit stating the penalties that will be applied if they do not adhere to these.

There is also advice with regard to sailing in the vicinity of diving boats and a training session may be provided during the winter at intervals to ensure communication between divers and sailors. Courses have been planned so that marks known to be used by divers are not also used during racing.

Courses are also available for specific areas of Carrick Roads when it is known that commercial shipping will be on the move.

A white flag is flown at the club or on the committee boat as warning when information is received regarding shipping movements.

PERSONAL INJURY

Danger before counter measures

Gear failure, collision or a misjudgement in boat handling are the most prevalent causes of personal injury in yacht racing. Due to the water temperature at any time of year a man overboard (MOB) has a risk of hypothermia. The greatest danger will arise from collisions, MOB, gear failure or handling misjudgement. In general, a collision, accidental gybe or rig failure could create a risk of personal injury, especially with the complication of an MOB.

Primary Countermeasures

The risks are minimised by good race management practices and the deterrent effect of the Race Protest Committee.

The race committee considers all problems experienced or identified during the previous year and use these to prepare information for the following year. A log book entry is made for every race.

Good communication between committee boat and clubhouse using two radio channels open at all times means that action can be taken quickly, ambulances arranged etc.

The RNLI are close to most of the racing areas and have a small vessel which can offer rescue in the estuary or bay waters should this be required in an emergency. The coastguard offer advice to the club regarding action to take in the event of injury and are also very close to the race areas.

Owners complete a declaration form when they enter stating that insurance is in place and they understand their responsibilities, including the understanding that the decision to race is theirs alone.

The NOR states what safety equipment is necessary

BOAT DAMAGE

Danger before countermeasures

The majority of competitors taking part in this racing will be experienced and will be familiar with the types of risk identified here. They will expect occasional damage as part of the risks they take when they participate

Primary countermeasures

The risks can be minimised by good race management practices and the deterrent effect of a strong Race Protest Committee.

Owners have to sign a declaration before racing stating that their insurance cover is in place and they take responsibility for their racing.

BOAT AND CREW UNACCOUNTED FOR

Danger before countermeasures

A boat and crew experience difficulties after the start of a race, unknown to race organisers and therefore cannot finish.

Primary countermeasures

The accounting for all yachts and crew in these type of events is significant in case weather conditions deteriorate or there is personal damage. Before the start, spotters list the sail numbers of all yachts starting and the number of boats on the start line. The finishing officers also list all finishers to ensure that all boats are accounted for. If there is any discrepancy the first course of action is to try to contact the missing boat using the contact number from their race entry form. There is provision in the SIs to disqualify a yacht if they do not report retirement and their positions if they have failed to finish. For offshore races there is a requirement to give a contact number during the race where all those on board are known. The coastguard are notified of the number of boats participating, boats must notify of retirement or report in to a given telephone number when they arrive at their destination. The boats are required to be equipped with the necessary safety equipment

ACCESS TO PARTICIPATING BOATS

Danger before counter measures

Competitors are at risk of injury whilst accessing their boats

Primary countermeasures

Access to and from boats is primarily within the inner harbour areas and is individual to skippers and their boats. The size of the boats means that all are either on moorings or in marinas.

The areas are all reasonably protected however there are commercial and other leisure users in the same waters.

A launch is provided by the club to ferry people to and from their boats, the Royal Cornwall Yacht Club launch is also available to their members and crew who compete

Contact Numbers

Flushing Sailing Club 01326 375980 or VHF channel 72, 16 plus M1 (37) for Flushing Launch

Falmouth Pilots 01326 211395 Mob: 07836661668

Harbour Commissioners VHF channel 12, 01326 213537

Ambulance / Police 999 Coast Guard 01326 317575