

# YARE BOAT CLUB

August 2010

## RISK ASSESSMENT – YARE CUP - 25th SEPTEMBER 2010 - WATER SAFETY

### Introduction

This risk assessment has been carried out in accordance with the requirements of the British Rowing Row Safe.. The risk mitigation measures identified will be included in the Safety Plans for the Head of the River Race (HORR) which will be distributed to officials and made available to competitors.

The Yare Cup has been held in its current format for several years, with many of the measures employed to minimise risk being well established and proven. The HORR attracts a large number of competitors and is held on a stretch of the River Yare.

For the duration of the HORR properly equipped safety boats will be positioned on the course: at the start and at two tight corners. The safety boat crews will be provided with operating guidelines and will be appropriately training by an experienced club member(s) and will be in contact with Race Control by radio/mobile phone. Guidelines will be given to all HORR officials in the use of radios and mobile numbers distributed in advance. Such guidelines will form a part of the Safety Plan. For the duration of the HORR a first aider will be available on call and can summons the emergency services if required.

The structure of this risk assessment is:

- An overview of the main categories of hazard addressed in the assessment.
- A detailed consideration of how these hazards impact each activity during the HORR, together with the risk management measures to be put in place to minimise the risk and the resultant risk level estimate (based on that used in the British Rowing Row Safe).

### Main Hazard Categories Present During the HORR

- Environmental hazards:
  - Lightning during thunderstorms.
  - Difficult water conditions due to high winds and/or fast flowing river.
  - Excessive temperatures: long periods of hot sun, or cold due to driving rain.
- Collision with:
  - Other competitors.
  - Other river users, primarily motor cruisers.
  - The river banks.
  - Marker buoys.
  - Flotsam in the river.
  - Water fowl.

All of which could lead to injury and/or capsize.

- Inexperience leading to capsize.
- Exertion induced medical conditions.
- Slip and trip hazards on boating and de-boating.
- Equipment malfunction.

## HORR Activities and Risk Management

### 1. Boating and De-boating

a. Slip and Trip Hazards. Slip hazard primarily due to water fowl faeces on landing stages. Trip hazards resultant from congestion in boat marshalling area. Risk management measures:

- Boat marshalling staff to check state of landing stage and wash down as necessary prior to commencement of boating on each day.
- Boat marshalling area permanently manned, crews to be supervised to minimise congestion.
- Adjustments to be made either before or after launching to minimise congestion.
- Briefing given to officials manning the boat marshalling area.
- Boat marshalling rules notified to competitors in advance.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

b. Collision with Competitors / Spectators on the Bank. Collision with other competitors or spectators whilst taking boats from the trailer park to the boat marshalling area. Risk management measures:

- Boat marshalling area physically separated to segregate boating and de-boating.
- Trailer park located adjacent to boat marshalling area to reduce length of carry.
- Competitors advised in advance about boat marshalling area and trailer parking
- Briefing given to officials manning the boat marshalling area.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

### 2. Proceeding to Race Start Marshalling Area

a. Collision with Other Competitors. Collision with other competitors may be with those that are also proceeding to the start, with those that are racing and with those that have finished. Risk management measures:

- Competitors briefed regarding hazardous areas and likely areas of conflict.
- Boats which do not reach the Start Area before the scheduled start time to waive rights of the river and be responsible for avoiding racing boats.
- Finishing boats to be marshalled away from the Finish Line as soon as race completed.
- Boat marshalling rules notified to competitors in advance.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

b. Collision with other River Users, Primarily Motor Cruisers. Motor cruisers travelling downstream will also use the passing lane in the same direction as competitors proceeding to the start. Risk management measures:

- Prior notification of HORR given to River Control at The Broads Authority.
- Notification given to local Hire Fleet and Motor Cruiser operators.
- HORR officials at both end of the course to motor cruiser traffic, advising how to proceed.
- Caution advised to competitors in boat marshalling rules notified to competitors in advance.

*Residual Risk: Probability: Highly Unlikely  
Severity: Harmful  
Risk Level: Tolerable*

c. Collision with the River Banks and Marker Buoys. Tight corners in the race, providing the potential for collision with the river bank and the marker buoys. Risk management measures:

- Crews instructed to location of potential hazards.
- Safety boats to be moored near two tightest corners to warn competitors of any dangers.

- Boat marshalling rules notified to competitors in advance.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

### 3. Start Marshalling Area.

a. Collision with Other Competitors. Downstream of the start the normal rules of traffic apply. This gives rise to a hazard when competitors proceeding downstream from the passing lane have to cross the path of those proceeding upstream to the start. Downstream of the start marshalling area crews that have exited the passing lane will want to warm up, with the potential of collisions in a congested area. Risk management measures:

- Start marshalling area manned by HRR officials who will be briefed on the potential hazard and will direct and advise competitors as necessary.
- Competitors instructed to proceed at least 100m passed the start before turning and at least 200m downstream before commencing practice and warming up.
- Boat marshalling rules notified to competitors in advance warn of hazard area of crossing to normal traffic rules.
- Competitors advised that safety cover is not provided beyond the start marshalling area and that where necessary Club Captains should instruct any less experienced competitors (particularly with regard to juniors) not to proceed beyond the start marshalling area.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

b. Collision with other River Users, Primarily Motor Cruisers. Downstream of the start the normal rules of traffic apply. This gives rise to a hazard when competitors and motor cruisers proceeding downstream have to cross the path of those proceeding upstream. Risk management measures:

- Prior notification of HRR given to River Control at The Broads Authority.
- Start marshalling area manned by HRR officials who will be briefed on the potential hazard, giving emphasis to separate competitors and motor cruisers, and will direct and advise competitors and motor cruisers as necessary.
- Caution advised to competitors in boat marshalling rules notified to competitors in advance.

*Residual Risk: Probability: Highly Unlikely  
Severity: Harmful  
Risk Level: Tolerable*

c. Collision with the River Banks. The risk of collision with the river banks in the start marshalling area is not assessed to be different to that during any normal club outing and so no special measures have been identified.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

d. Excessive Temperatures: Long Periods of Hot Sun, or Cold due to Driving Rain. In September long periods of hot sun are likely, whilst driving rain leading to cold is also possible. The risk management measures therefore are to minimise competitors and HRR staff exposure to the extreme elements:

- Competitors will only be allowed to boat with all the opposition, thereby minimising the possibility that a crew is left waiting at the start for others.
- The flow of crews to the start will, when necessary, be regulated by Race Control, who will be in radio/ mobile phone contact with the Start Marshal and Boating Marshals.
- Where a crew fails to arrive at the start at its allotted race time, Race Control (in discussion with the Start Marshal) has the authority to disqualify the late crew, and by this means may prevent a crew from experiencing unnecessary exposure to the elements.
- Where possible, HRR officials who necessarily have to remain in the open will be provided with protection from sun and rain.
- HRR officials advised (at the helpers' meeting and in prior briefs) to be appropriately prepared for weather conditions.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

4. Racing

a. Collision with Other Competitors. During the race, collision with other competitors will be due to one or more competitors steering a bad course. Risk management measures:

- Races will only be started once the preceding race has cleared the course.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

b. Collision with other River Users, Primarily Motor Cruisers. The River Yare will remain open to navigation during the race. Risk management measures:

- Prior notification of HRR given to River Control at The Broads Authority.
- Start and Finish Marshals will be briefed on the potential hazard, and will direct and advise motor cruisers as necessary.
- Start Marshals will filter motor cruiser traffic upstream between races.
- Umpires responsible for starting race only when the course is clear and have the responsibility to halt a race if safety requires.

*Residual Risk: Probability: Highly Unlikely  
Severity: Harmful  
Risk Level: Tolerable*

c. Collision with the River Banks. The river bank along parts of the race course is not in all places parallel to the race lane, which could induce competitors to steer off the correct course risking collision with the bank. Risk management measures:

- Competitors will be advised of this potential hazard in race safety instructions.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

d. Collision with Marker Buoys. Marker buoys are present to mark navigation limits. Apart from the safety boat and medical facilities identified in the introduction there are no further risk management measures identified.

*Residual Risk: Probability: Unlikely  
Severity: Slightly Harmful  
Risk Level: Tolerable*

e. Collision with Water Fowl. Water fowl may be a problem at any point in the HRR; however, the affect of a collision with them will be greatest during a race when competitors are at high speed. Experience has shown that water fowl relocate from high concentrations of boating activity and where they remain are generally proficient at moving out of a boat course. No risk management measures are identified.

*Residual Risk: Probability: Highly Unlikely  
Severity: Slightly Harmful  
Risk Level: Trivial*

f. Collision with Flotsam in the River. Flotsam may be a problem at any point in the HRR; however, the affect of a collision with it will be greatest during a race when competitors are at high speed. Experience has shown that flotsam is primarily a problem after extensive periods of rain when the flow rate of the river is high. Risk management measure:

The crew of the safety boat at the finish (upstream of course) will be instructed to keep a watch out for large items of flotsam in the river and to take appropriate action: to remove the object and, if necessary, advise Race Control to order a suspension of racing.

*Residual Risk: Probability: Highly Unlikely*  
*Severity: Harmful*  
*Risk Level: Tolerable*

g. Inexperience Leading to Capsize. Whether competitors are sufficiently experienced to race is an issue that rests with clubs and coaches. Apart from the safety boat and medical facilities identified in the introduction there are no further risk management measures identified.

*Residual Risk: Probability: Unlikely*  
*Severity: Slightly Harmful*  
*Risk Level: Tolerable*

h. Exertion Induced Medical Conditions. Although competitors may be expected to be at a sufficient level of fitness, there remains the possibility that exertion during a race could lead to the onset of severe medical conditions. Apart from the safety boat and medical facilities identified in the introduction there are no further risk management measures identified.

*Residual Risk: Probability: Highly Unlikely*  
*Severity: Extremely Harmful*  
*Risk Level: Moderate*

i. Equipment Malfunction. Equipment malfunction may be a problem at any point in the HRR; however, the affect of malfunction will be greatest during a race when boats are under stress. Whilst boat inspections by umpires in the boat marshalling area may identify such issues, this remains a competitor responsibility. No additional risk management measures are identified.

*Residual Risk: Probability: Unlikely*  
*Severity: Slightly Harmful*  
*Risk Level: Tolerable*

## 5. Non-Specific Activity Hazards

a. Lightning During Thunderstorms. Whilst the risk of thunderstorms during September is small, the use of carbon fibre materials presents a hazard to competitors. Risk management measures:

- The HRR official in charge of Race Control will be responsible for monitoring weather conditions and should the risk of lightning be present, s/he will suspend racing and instruct all HRR participants to leave the water

*Residual Risk: Probability: Highly Unlikely*  
*Severity: Extremely Harmful*  
*Risk Level: Moderate*

b. Difficult Water Conditions due to High Winds and/or Fast Flowing River. Whilst the risk of high winds and/or a fast flowing river during September is not excessive, such conditions can present a hazard to competitors. This is particularly so for those that are inexperienced and less strong, primarily to juniors. Risk management measures:

- The HRR official in charge of Race Control will be responsible for monitoring the river condition and should it deteriorate, s/he will either suspend racing or suspend particular classes of racing, as necessary.

*Residual Risk: Probability: Unlikely*  
*Severity: Slightly Harmful*  
*Risk Level: Tolerable*

## 6. Activities Outside Racing Hours

a. Hazards from Swimming. Swimming in the river is hazardous due to the risk of water-borne diseases and the possibility of underwater obstacles and sharp objects on the riverbed. Whilst swimming will be discouraged and the risks will be identified to competitors in the safety instructions provided to them, it does not form a part of the HRR and so is not subject to risk assessment.

b. Training Outside HRR Control. Similarly, training on the river outside the duration of racing does not form part of the HRR and so is not subject to risk assessment. The management of crews is then under the control of clubs.