RISK ASSESSMENT for University Novice Race Day. 1,000m course, time trial. Start: 50m downstream of Sutton Weaver Swing Bridge. Finish: Runcorn Rowing Club Boathouse. To be held this year on 8th December 2024.

Liverpool University Boat Club (LUBC) has assessed the 2024 University Novice Race Day risks using Runcorn Rowing Club's Safety Matrix (see below).

Severity of Outcome					
	Slightly harmful 1	Harmful 2	Extremely harmful 3		
Highly	Trivial risk	Tolerable	Moderate risk		
unlikely 1	1	risk 2	3		
Unlikely	Tolerable risk	Moderate	Substantial risk		
2	2	risk 4	6		
Likely	Moderate risk	Substantial	Intolerable risk		
3	3	risk 6	9		

#### **Risk Level - Action and Timescale**

Trivial	No action is required.
Tolerable	No additional controls are required. Consideration may be given to a more effective solution or improvement.
Moderate	Efforts should be made to reduce the risk. Risk reduction measures should be implemented within a defined time period. Where the moderate risk is associated with harmful / serious consequences further assessment may be necessary to establish more precisely the likelihood of harm as a basis for determining the need for improved control measures.
Substantial	The activity should not be started until the risk has been reduced. Considerable resources may have to be allocated to reduce the risk. Where the risk involves activity already in progress, urgent action should be taken.
Intolerable	Activity should not be started or continued until the risk has been reduced. If it is not possible to reduce risk even with unlimited resources, activity has to remain prohibited.

N.B: Tolerable here means that risk has been reduced to the lowest level that is reasonably practicable. i.e. an acceptable risk. Consideration has been given to water hazards, depth, turbulence, currents, obstacles, and pollution. We've looked at access to the water; is the bank made up, shelving or vertical? What about visibility? Can all the activities be clearly monitored from the bank? Is there any history of accidents resulting from any of the above?

#### Other important points of note

- 1. If there has been no history of accidents, the Chair of the Organising Committee has then looked at the activities themselves. Are they supervised or unsupervised, what is the degree of competence of the athletes involved? Time of day, and month of year have an effect on visibility, and on water temperature.
- 2. What about the participants are they a hazard to themselves, can they swim, and what tests are carried out to ensure they can? Are they properly clad for the conditions they will encounter? Coxswains must wear lifejackets, but are they adequate and in working order, and is the coxswain adequately protected against the elements?
- 3. Damaged equipment is a hazard to everyone; the user in the first instance, but also those around, who may be affected by it or even forced into being part of a rescue.

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Date	Assessment completed by:	Signed
18/09/2022	Joseph Aldridge	J. Aldridge
19/8/2023	Robert Harris	R. Harris.
10/07/2024	Robert Harris	R.Harris.

01 On land prior to the race

Ref.	Situation / Hazard	Control Measures	Point / Score	Effectiveness Record	Conclusions
01.1	Injury while assembling boats.	Competitors are generally inexperienced members of rowing clubs with support offered from club's captains, coaches and senior members of the club.  All boats must be licenced and insured, as per British	3	Only minor incidents recorded.	Hazard adequately controlled.
		Rowing policy.			
01.2	Chemical incident at INOVYN works.	INOVYN (formerly Mexichem and INEOS Fluor) is informed when races are scheduled, and we become part of their Off-Site Emergency Plan.	3	No recorded incidents.	Hazard adequately controlled.
		Marshals are present to ensure the safety of competitors.  Details of response are provided in the Event Safety Plan sent to all Clubs and Umpires attending. See also Appendix 12 of Event Safety Plan: 'Emergency Procedure - Gas Escape at INOVYN chemical works'			
		The event has a Public Address system in the boathouse / boat trailer park area and marshals (many with 2-way radios) are present to control competitors.			
01.3	Traffic incident on M56 motorway.	Marshals present to control competitors.	3	No recorded incidents.	Hazard adequately controlled.
01.4	Fire.	The event has a Public Address system in the boathouse / boat trailer park area and Marshals are present to control competitors. Marshals present to control competitors. Details of response are provided in the Event Safety Plan sent to all Clubs and Umpires attending.	3	No recorded incidents.	Hazard adequately controlled.
		Fire extinguishers are available and the Fire Brigade will be called in an emergency.			

01 On land prior to the race (cont.)

01.5	Inclement weather, or dangerous conditions on the course.	The Race Committee on advice from the Safety Advisor may choose to curtail, alter, or suspend the race.  See also Appendix 3 & 4 of the Event Safety Plan.	4	No postponed or cancelled events for this event.  On the same stretch of river, one RRC event postponed in 2015 for one hour until mist had cleared, to ensure safe visibility.  Two cancellations of RRC Head races in Feb/March as water levels were too high (2017) and river was iced over (2018).	River conditions in late winter are rarely the same as in the autumn.  Hazard adequately controlled.
01.5.1	Hypothermia.	Low risk on land before the race.  Information for Head Race Competitors (Event Safety Plan, Appendix 6) is sent separately in advance to clubs and advises crews and coaches about the need to wear adequate clothing in cold weather.  Control Commission and landing stage officials are tasked to refuse to allow crew members to take to the water if they appear to have inadequate clothing for the anticipated conditions.  See also Appendix 11 of the Event Safety Plan.	2	No incidents recorded	Hazard adequately controlled.

01 On land prior to the race (cont.)

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01.5.2	Lightning & thunderstorms.	If the weather forecast during the preceding three days is for thunderstorms, Safety Advisor and Chair of the Race Committee will monitor progress.  Competitors will follow the RowSafe 30:30 Rule:  • To calculate the distance between you and the storm, divide the number of seconds by 3 to find the distance in kilometers.  • If the distance between the thunder and lightning increases over a couple of strikes, the storm is moving away from you. If it decreases, it is coming towards you.  • People hit by lightning are mostly hit before and after the peak of the storm. Consider how close is the lightning, ignore any rain.  • If the 'flash' to 'bang' is 30 seconds or less, seek shelter.  • Stay in this shelter until 30 minutes past the last clap of thunder.  If there is a threat of lightning on land prior to the race, marshals using loudhailers will advise competitors, spectators and officials to take cover in buildings and vehicles until the threat is over.  There is adequate cover for the number of competitors anticipated. The Race Committee on advice from the Safety Advisor may choose to cancel, curtail, alter or suspend the event.  See also Appendix 8 of the Event Safety Plan.	3	No lightning has been experienced during the last ten years of time-trial events on this course during the autumn.	Hazard adequately controlled.
01.6	Interaction e.g. collision between competitors and spectators.	One of the prime duties of the Crew Call team, Control Commission (boat safety inspections) and the landing stage marshals is to warn spectators of the activities of crews.  As much as possible, spectators are segregated in the boating area. Because of the nature of time-trial racing, there are relatively few spectators at this type of event.	2	No recorded incidents.	Hazard adequately controlled.

#### 02 Going up to the start

Ref.	Situation / Hazard	Control Measures	Point / Score	Effectiveness Record	Conclusions
02.1	Moderate or large floating debris. (eg. tree branches, railway sleepers, cable drums, gas cylinders)	The course will be inspected for debris and cleared by the work party (in launches or on the bank) setting out the course signs before the event. This is likely to be the day before.  Any such debris appearing on the course on the morning of the event will be cleared by either the Safety Advisor and launch driver on his pre-event inspection on the morning of the event, or by the marshals/umpires/safety boat launches as crews paddle up to the start.  The course may be altered if un-movable debris appears, or safety boat / marshal positions may be implemented, or extra buoys added.  There may be other river-users on the water. The waterway is not closed	1	No reported incidents at Runcorn RC events in the last five years)  Debris has reduced considerably since Stobart Ports took over Weston Point Docks in 2013, and cable drum etc. storage ceased.	Hazard adequately controlled.
02.2	Failure of safety launch.	Three Safety Launches will be provided for this 1,000 metre race so that the entire course can be visible.  If one safety launch fails or is lost to the event more than 24 hours before the event, either:  • Borrow a RIB from local clubs (Liverpool Victoria RC or Warrington RC)  • Or provide the small RIB that is usually stored at RRC, and allocate it to the Finish.  If one safety launch fails or is lost to the event less than 24 hours before the event, the event can continue, following these actions:  • Move the other 2 launches to mid-course and Start  • Appoint extra land-based Finish area marshals with radios and long (25 or 40 meter) throwlines to supervise the Finish area.  If two safety launches fail, the preference would be to cancel racing and supervise any crews on the water back to the landing Stages.  Please see Appendix 3, 4 and 10 of the Event Safety Plan for further detail.	3	No reported incidents for this event.  One event during RRC-hosted races in the last five years with one launch.	Hazard adequately controlled.

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02.3	Capsize.	All competitors may be asked about procedures following capsize before boating.	4	No reported incidents.	Hazard adequately controlled.
		All crews will be in eights, coxed quads and fours, which are less likely to capsize than smaller boats.			
		All launch drivers will have a RYA National Powerboat Level 2 Certificate and will always be in radio contact with Race Control, who can summon first aid if required.			
		See also Appendix 2 and 7 of the Event Safety Plan (Weil's Disease or Leptospirosis).			
02.4	Collision.	Qualified umpires, marshals and Safety Launches marshal competitors up to the Start.	3	No reported incidents.	Hazard adequately controlled.
		All boats will be steered by experienced coxes. Experienced marshals supervise the Start marshaling areas.			
		All launch drivers will have a RYA National Powerboat Level 2 Certificate and are in radio contact with Race Control, who can summon first aid if required.			
		See also Appendix 7 of the Event Safety Plan (Weil's Disease or Leptospirosis).			

02.5	Inexperienced coxes or scullers.	All boats will be commanded and steered by experienced coxes. Coxes should have at least one year's worth of coxing experience, whilst novice crews race, for which this is likely to be their first.  The course is checked before each race for current hazards. A coxes and steerers briefing is held prior to each race, to explain these hazards.  The whole course is observed by marshals, safety boats or umpires with two-way radios. They can provide advice to a steerer, warn officials downstream by radio about poorly-steered boats, or hold a crew at the side of the river till the end of a division and then get a safety launch to accompany them back to the landing stages, if they are judged a hazard to others (e.g. due to steering equipment problems.)	2	The demand for experienced coxes to command the boat reduces this risk significantly.  No reported incidents.	Hazard adequately controlled.
02.6	Sudden illness.	First aid provision is moved up to the Finish line during embarkation. All safety launches to carry a first aid kit.	3	No reported incidents.	Hazard adequately controlled.
02.7	Cold and exposure.	Competitors' boats and equipment are checked prior to embarkation to ensure their fitness to race. This includes clothing appropriate to the weather conditions.  Safety boats, and Marshals at the Start, carry exposure blankets to use in an emergency. Measures have been adopted to ensure the minimum amount of waiting time for crews.  This hazard has a changeable level of risk. The club strives to minimize the hazard & consequences each time an event is held.	4	No major issues reported in the three years at this event.	Hazard controlled to some extent; however, the risk remains a high priority.

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02.7.1	Cold water immersion and hypothermia.	Low risk going up to the Start; moderate risk as waiting to race.  All crews will be in eights, coxed quads and fours, which are more stable and less likely to capsize than smaller boats.  The number of crews will be small (fewer than 15 boats in each division), so waiting time at the Start will be limited.  Control commission and landing stage officials are tasked to refuse crews to take to the water if they appear to have inadequate clothing for the anticipated conditions.  Start marshals & Start Safety boat crew briefed to look out for signs:  • mild hypothermia: complaints of feeling cold and tired, poor comprehension, disorientation, poor concentration, irrational behavior, violent outbursts and confusion.  • severe hypothermia: shivering, pale; blue lips and nails, rapid breathing, wheezing and coughing, fast pulse and slurred speech.  and respond if they detect any of these symptoms, eg.  •evacuate crew member to safety launch, provide extra clothes/hat/space blanket protection, evacuate to nearest First Aider, evacuate to the first aid team in the warm area at the clubhouse.  In severe cases, marshals are to use radio to call an ambulance to Runcorn Rowing Club.  For more information, please see Appendix 2 and 11 of the Event Safety Plan.	3	No incidents recorded at this event.	Hazard adequately controlled.
02.7.2	Exposure to	Very low risk in December. Competitors and coaches are warned	1	No incidents recorded at	Hazard
	sun and high temperatures.	that if the weather is hot and sunny, crews must have access to sun-screen, hats and water bottles while on the water.		this event.	adequately controlled.

02.7.3	Lightning & thunderstorms.	See 1.5.2 above.  If there is a threat of lightning as crews are going up to the Start, the options for taking cover are limited. There are no buildings or vehicles accessible from the course. Competitors will be advised by the Starter and marshals of the risk.  Competitors will either be told to move away from open river to the river banks and to keep a low profile, until the threat is over (as notified by marshals).	3	No lightning has been experienced during the last ten years of time-trial events on this course during the autumn.	Hazard adequately controlled.

03 During the race

Ref.	Situation / Hazard	Control Measures	Point / Score	Effectiveness Record	Conclusions
03.1	Moderate or large floating debris. (eg. tree branches, railway sleepers, cable drums, gas cylinders)	See 02.1 above.  Any such debris appearing on the course during the event will be cleared by the marshals / umpires / safety boat launches.	1	No reported incidents in the last five years for any event along this course.	Hazard adequately controlled.
03.2	Failure of safety launch.	See 02.2 above.	3	No reported incidents at Novice Race Day.	Hazard adequately controlled.
03.3	Capsize.	See 02.3 above.  Qualified umpires and Safety Launches marshal the competitors over the whole course, including Start & Finish marshaling areas.  Umpires, marshalls, and landing stage team are equipped with throwlines.	4	No incidents of capsize from eights in the last five years. Records from RRC and LUBC events.	Hazards minimized through the use of eights and coxed quads and fours.  Hazards adequately controlled.

03 During the race (cont.)

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03.4	Collision.	See 02.4 above.  No upstream rowing boat movements are permitted on the race course while races are in progress downstream.  Racing will take place as a time trial, much like a Head race. Along this course there are minimal bends and tight corners. All competitors will be coxed during the race.	4	Records from RRC events as below.  1 collision in March 2015: a crew went straight across a bend into the outside bank, colliding with an overtaking crew. No injuries, both boats reversed and continued.  No other reported incidents in recent years' head races, except minor blade clashes, following amelioration measures.	Hazard minimised as much as possible and therefore adequately controlled.
03.5	Sudden illness.	See 02.6 above.  A first aid team, led by a qualified first aider, will be situated at the boathouses. They can be contacted directly or via Race Control by radio during the race. All safety launches carry a first aid kit.	3	Records from RRC events as below.  A crew member of 2x had an asthma attack at Finish in Oct 2013. Safety boat evacuated casualties to first aid.  No other reported incidents in the last five years.	Hazard adequately controlled.

03 During the race (cont.)

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03.6	Cold and exposure.	See 02.7 above.  Measures have been adopted to ensure the minimum amount of waiting time for crews.  Crews will be listed on the Draw to take to the water in the sequence below. This aims to avoid competitors being exposed to cold, wet or windy weather any more than necessary.  Heavy duty tents (typically 3m x 3m x 2m) will be provided for timekeepers if continuous or heavy rain is forecast.	3	Records from RRC events as below.  Oct 2014 during a 4.5km race, one girl was treated for cold by a first Aider at Finish and evacuated by launch. Doctor said 'main problem was insufficient clothing'. No medical treatment needed.  No complaints or other incidents in the last five years.	Hazard controlled to some extent.  Prevention is better than cure: minimizing the risk remains a high priority.
03.6.1	Cold water immersion and hypothermia.	See 02.71 above.  Moderate risk during the race, increased from low risk going up to the Start and the same risk as waiting to begin racing.	3	Records from RRC events as below.  Oct 2014 during a 4.5km race, one girl was treated for cold by a first Aider at Finish and evacuated by launch. Doctor said 'main problem was insufficient clothing'. No medical treatment needed.  No complaints or other incidents in the last five years.	Hazard adequately controlled.

03.6.2	Exposure to sun and high temperatures.	See 02.72 above.	1	No complaints.	Hazard adequately controlled.
03.6.3	Lightning & thunderstorms.	See 01.5.2 and 02.7.3 above.  If there is a threat of lightning as crews are racing, the options for taking cover are limited. There are no buildings or vehicles on the course. CRC or SA will advise the Starter and Marshals of the risk by radio.  Competitors on the course will either be allowed to complete their race (<10 minutes) and then told to pull into the side, or told to move away from open river to the river banks and to keep a low profile, until the threat is over (as notified by marshals).	3	No lightning has been experienced during the last ten years of time-trial events on this course during autumn for both RRC and LUBC events.	Hazard adequately controlled.
03.7	Inexperienced coxes or scullers.	See 02.5 above.  An extended coxes & steerers briefing is held prior to each race to explain the small number of potential hazards. A large scale (2 meter x 3 meter) annotated banner map of the river (ex-Ordnance Survey) is provided.  There will be marshalls, volunteers and signage in place both at the start and at the end of the course.	2	No reported incidents.	Hazards adequately controlled.
03.8	Deterioration of the weather.	The Race Committee on advice from the Safety Advisor may choose to curtail, alter, or suspend the race.	3	Records from RRC as below.  The second division has been cancelled twice in ten years due to a change in the weather.  All competitors were supervised back to the Clubhouse.	Hazard adequately controlled.

03 During the race (cont.)

03.9	Crew member falling out of	Competitors' boats and equipment are checked prior to embarkation to ensure their fitness to race.	3	Records from RRC as below.	Hazard adequately controlled.
	boat.	All competitors are members of rowing clubs affiliated to British		In March 2011, one	
		Rowing and should have been taught how to deal with capsize or being in the water, as outlined in the Event Safety Plan, Appendix		reported incident. (bow in LUBC W Novice 8+	
		6.		while re-railing her	
				sliding seat)	
		Qualified umpires and Safety Launches stationed at			
		regular intervals supervise the whole course during the		No incidents in the last	
		race.		five years.	
		All launch drivers will have a RYA National Powerboat L2 Certificate and are in radio contact with Race Control who can summon first aid, where required.			

04 Returning from the Finish to the landing stages

Ref.	Situation / Hazard	Control Measures	Point / Score	Effectiveness Record	Conclusions
04.1	Moderate or large floating debris. (eg. tree branches, railway sleepers, cable drums, gas cylinders)	See 02.1 and 03.1 above.  The risk is highly unlikely as the return to landing stage is a short distance and entirely on the Weston Canal, which has a minimal current, and will have been inspected for debris within the previous hour.  Any such debris appearing on the course during the event will be cleared by the marshals/umpires/safety boat launches.	1	No reported incidents in the last five years from RRC and LUBC events.	Hazard adequately controlled.
04.2	Failure of safety launch.	See 02.2 and 03.2 above.	3	No reported incidents at LUBC Novice Race Day.	Hazard adequately controlled.
04.3	Capsize.	See 02.3 and 03.3 above.  Qualified umpires at the Finish albeit on land, marshals in Safety Launch outside Runcorn Rowing Club boathouses to guide competitors back to the landing stages.	4	No reported incidents.	Hazard adequately controlled.

# 04 Returning from the Finish to the landing stages (cont.)

04.4	Collision.	See 02.4 and 03.4 above.  Extra marshals and Safety Launch in the Finish marshaling area to advise crews. Qualified umpires on land to direct further if required.  Chair of Organising Committee will notify Weaver Motor Boat Club in advance of Head Race dates, since there will be more rowing boats on the water than normal.	3	Records from RRC as below.  One reported incident in Oct 2013. Motor cruiser came out of Sutton Weaver Basin, engine failed, collided with 1x. No injury or damage.  No other reported incidents in the last five years.  Weaver MBC motor boats not a hazard in November, as most WMBC boats are only licenced for the summer.	Hazard adequately controlled.
04.5	Cold and exposure.	See 03.6 and 02.7 above.  Marshals at the bridges, and launches following the crews, carry exposure blankets to use in an emergency.  Finish Marshals and a launch are positioned to minimise delays due to boats stopping in the Finish marshalling area and at the landing stages.  Umpires in launches are required to check crews waiting in the Finish marshalling and landing stage areas for cold / exposure / illness and evacuate any crew members affected. Launches also stay on the water till all competitors are on land.  This hazard has a changeable level of risk, and the club is striving to minimise the hazard & consequences every time an event is held.	4	No record from RRC and LUBC events of complaints about cold/exposure in this part of the waterway in the last five years.	Hazard controlled to some extent; however the risk remains a high priority.

04 Returning from the Finish to the landing stages (cont.)

04.5.1	Cold water immersion and hypothermia.	See 02.7.1 and 03.6.1 above.  Low risk after the race, decreased from moderate risk during the race and the same level of risk as waiting to begin racing.	2	No incidents recorded.	Hazard adequately controlled.
04.5.2	Lightning & thunderstorms.	See 01.5.2, 02.7.3 and 03.6.3 above.  If there is a threat of lightning as crews are returning from the Finish, the options for taking cover are limited. The best solution is to quickly and safely bring all boats and competitors to the landing stages.  Further support from marshals and Finish Marshals can be in place to assist with this.	3	No lightning has been experienced during the last ten years of time-trial events on this course during autumn events.	Hazard adequately controlled.
04.6	Sudden illness.	See 02.6 and 03.5 above.  First aid provision is moved up to the finish line during the race, and first aid team is based at boathouses. All safety launches carry a first aid kit.	3	No reported incidents.	Hazard adequately controlled.
04.7	Inexperienced coxes.	See 02.6 and 03.5 above.  There will be marshalls, volunteers and signage in place both at the start and at the end of the course.	2	No reported incidents.	Hazard adequately controlled.

#### 05 On land after the race

Ref.	Situation / Hazard	Control Measures	Point / Score	Effectiveness Record	Conclusions
05.1	Traffic on the parking areas.	Area marshaled by members of RRC and LUBC.  Traffic marshals are in radio contact with each other, and with Race Control. See also Appendix 5 of the Event Safety Plan.	4	No reported incidents.	Hazard adequately controlled.
05.2	Injury while dismantling boats.	Competitors are generally inexperienced members of rowing clubs with support offered from club's captains, coaches and senior members of the club.  See 01.1 above.	2	Only minor incidents recorded.	Hazard adequately controlled.
05.3	Chemical incident at INOVYN works.	See 01.2 above.	3	No recorded incidents.	Hazard adequately controlled.
05.4	Traffic incident on M56 motorway.	See 01.3 above.	3	No recorded incidents.	Hazard adequately controlled.
05.5	Fire.	See 01.4 above.	3	No recorded incidents.	Hazard adequately controlled.
05.6	Inclement weather.	Heating & first aid are provided.  The two Clubhouses, with the 'Jim Newcomb' boathouse and other Runcorn RC buildings, having space under cover for all anticipated crew/spectator shelter requirements.	2	No recorded incidents.	Hazard adequately controlled.
05.6.1	Cold water immersion and hypothermia	See 04.5.1, 03.6.1 and 02.7.1 above.  Very low risk of cold water immersion when on land; low risk of hypothermia on land after race.	2	No recorded incidents.	Hazard adequately controlled.

05 On land after the race (cont.)

05.6.2	Lightning & thunderstorms	See 01.5.2, 02.7.3 and 03.6.3 above.  Highest risk of lightning affecting competitors whilst on the water.  Once all crews are off the water, and lightning / thunderstorms look likely, Marshals are to direct competitors to stay away from the water.  See Appendix 8 of the Event Safety Plan.	3	No lightning in the last ten years of time-trial events on this course during November.	Hazard adequately controlled.
05.7	Interaction e.g. collision between competitors and spectators.	See 01.6 above.	2	No recorded incidents.	Hazard adequately controlled.
05.8	Clean, dry, check	The Organising Committee requests that once boats are off the water the "Clean, Dry, Check" policy is implemented to prevent the spread of invasive species.	3	No recorded incidents.	Hazard adequately controlled.