



# Risk Assessment - Saturday 6th May 2017

The Course - Approximately 1,000 metres to and from MAABC.

This risk assessment considers the following types of risks:

1. Collision and grounding
2. Over turn / capsize / swamping
3. Drowning
4. Hypothermia
5. Injuries
6. Blocked access routes / traffic management
7. Adverse weather conditions
8. Cancellation of event
9. Failure of communications
10. Tidal conditions and land based risks

In the tables listed against the various headings adjacent to the HAZARD column the quantities are to interpreted thus:

S = Potential severity. L = Likelihood.

R = Risk is the product of the two numbers S & L

The higher the number the greater the risk.

RRR = Risk Reduction Ratio - The higher the number the greater the importance of reducing the number by concentrated and special attention.

	HAZARD	S	L	R	(See explanation at head of the table) CONTROL	RRR	MONITOR
<b>1 – COLLISION AND GROUNDING</b>							
1.1	River traffic	3	2	6	The river is not closed so there will be normal weekend traffic during the event. Spotters with radios positioned at the finish will be in contact with the umpires. The regatta will monitor Marine band radio to be advised of Class V vessels or any major PLA incidents. Umpires will check with the spotter and delay races to allow the course to be clear.	3	Umpires (particularly start controller), Safety Advisor & Marshals
1.2	Between competitors craft before and during racing	3	3	9	Particularly racing crews cutting in towards Middlesex bank on downriver course. Instructions to crews to include warning. Instructions to umpires to be vigilant and warn crews when they pass onto the port station. Additional risk of collision in 3 boat racing. Crews and umpires to be particularly alert.	6	Umpires, Safety Advisor &, Marshals Level of crew competency may be a factor.
1.3	Collision with stationary items or obstructions	3	2	6	Crews are required to keep a good look out. Umpires' craft, a RIB fast rescue craft and Marshals may warn of any hazard but crews should be aware.	4	All waterborne officials, Safety Advisor and rescue personnel
1.4	Collision with other craft during marshalling	2	3	6	Instructions to competitors to warn of this risk. Marshalling is in single file in a bay and close to or in contact with the bank when stationary. Start / marshalling area marshals to keep crews orderly and be aware of potential collisions.	4	Competitors, marshals
1.5	Collision with debris	3	1	3	If large debris is spotted report to Umpire, Safety Advisor, finish and Race Control via radio.	3	ALL
1.6	Collision due to narrow waterway	3	1	3	Some tides are low with little water in the channel around the low tide points. A longer gap to be left around the low tide point than in previous years. No three lane racing allowed on low tides.	3	Umpires, Safety Advisor & Marshals
1.7	Local UL and MAA club crossing Points on course.	3	1	3	Instruction to crews to include warning. Marked as danger point on map. Instruction to umpires to be vigilant. Crossing limit by Surrey marker buoy (Red).		Marshals
1.8	Grounding	1	3	3	Racing takes place on the starboard side of the Fairway but there is an increase risk when marshalling or transiting to/from the start/finish in the Inshore Zones, particularly at low tide. Good lookout must be maintained.	1	Competitors, marshals



	HAZARD	S	L	R	(See explanation at head of the table) CONTROL	RRR	MONITOR
<b>2 – OVERTURNING / CAPSIZE / SWAMPING</b>							
2.1	Competitors craft	2	3	6	Experience of competitors – regatta often has low status / experience competitors. Capsizes in novice / intermediate or junior events have happened in recent years. Umpires in particular to be prepared for this to happen.	4	Competitors / umpires
2.2	From wake of other craft	2	3	6	Keep speeds down during the event. High speeds only in the event of an emergency situation.	4	All support craft
2.3	Safety Rib	2	3	6	To be stationed to ensure rapid response over all of course depending upon racing up or down river.	4	Safety Launch/RNLI
2.4	During retrieval of persons from the water	3	3	9	Rescue craft to have enough free board/buoyancy to prevent swamping/overturning during rescue. To use prescribed rescue/retrieval techniques. Minimum 2 rescue personnel per craft.	4	Rescue personnel. All launches other than rubber dinghies.
<b>3 – DROWNING</b>							
3.1	Unintended immersion in river	3	3	9	Personnel involved with the water elements of the event must wear a personal floatation device (life jacket) and be able to swim (see 3.2). All craft on station to provide cover in event of water borne accidents.	6	All personnel
3.2	Use of life jackets	3	2	6	Accepted national practice is that rowers do not wear lifejacket/buoyancy aids unless a need specifically identified by individual club safety advisors. This practice is in line with BR 'Row Safe' published guidance. Individual crew members will have satisfied club membership requirement regarding swimming ability. Immersion of officials – all will be wearing lifejackets/buoyancy aids. Alarm will be raised by other member of crew (e.g. driver). Line of sight coverage by race officials along whole course. Coxes required to wear life jacket/buoyancy aid; reviewed by control commission. Member of public/spectator – possible risk in vicinity of bridges – line of sight coverage by race officials and rescue boats.	4	All personnel
<b>4 – HYPOTHERMIA</b>							
4.1	Immersion	3	3	9	All regatta officials to carry thermal/foil blankets. Remove persons from water ASAP, wrap and keep warm. Remove to Regatta HQ and attending First Aid / Doctor	6	Rescue personnel including umpires launches and Safety Rib
4.2	Cold weather	2	3	6	All personnel to wear adequate layered and warm clothing	4	All personnel
<b>5 – INJURIES</b>							
5.1	Accidents resulting in injuries to support personnel and competitors	3	2	6	Adequate First Aid cover on and off the water. Ensure all support personal are aware of the locations of First Aid personnel / facilities. Ensure the communications net is operational and manned during the event. Ensure all marshals are issued with loud hailer (and were possible radio) to raise the alarm	4	ALL



	HAZARD	S	L	R	(See explanation at head of the table) CONTROL	RRR	MONITOR
5.2	Sharp objects on shingle beach	2	2	4	Crews boating should have suitable footwear to protect them from sharp objects on the beach. There is an increased risk from infection from Thames water. The "Instructions to competitors" includes this advice.	4	ALL
<b>6 – BLOCKED ACCESS ROUTES / TRAFFIC MANAGEMENT</b>							
6.1	Delay for emergency service/first aiders reaching casualty	2	2	4	Regatta HQ has a narrow access point. Clear signage and instructions to competitors state this. Access to other rowing clubs must be left clear. All individuals responsible for their vehicle.	4	Police; all personnel
<b>7 – CANCELLATION OF EVENT</b>							
7.1	Cancellation.	2	2	4	If the event is cancelled rescue teams/first aid support to remain on station until instructed. MAA launch marshal to prevent any further competitors from boating. Marshals/rescue to move competitors to sheltered shore instruct any remaining competitors on the river the event is cancelled and that normal navigation rules will apply unless instructed.	3	PLA, Chairman of Race Committee, Safety Advisor
<b>8 – FAILURE OF COMMUNICATIONS</b>							
8.1	Failure of race communications during the event	3	2	6	Radios will be at the start and the finish, with all umpires afloat and on the Rescue RIB. All radios to be tested the day before use and on the day prior to the start of racing. Spare batteries to be checked for output and available for all radios. Base station to be at the Regatta HQ. Race control Channel Priority at all times (except during an emergency controlled by the Safety launch). Instructions issued to rescue crews on procedure to be adopted if there is a comms failure. For emergencies on water attract attention of rescue craft through, the use of loud hailer. Contact race control through mobile telephones if necessary – numbers to be supplied. Rescue personnel to continue to patrol and carry out rescues as required Contact any PLA or RNLI craft as they work on separate network to assist with emergencies.	3	All
<b>9 – TIDAL CONDITIONS AND LAND-BASED RISKS</b>							
9.1	Unfamiliarity of visiting crews.	2	2	4	All crews told they can only enter if coxes and steersmen familiar with the navigation laws especially the Tideway code of Practice for Rowing (2009), the PLA Bye laws and the Collision Regulations (Col Regs). Issue crews with maps of course and links to British Rowing advice on steering on the tideway Marshals and other officials to be aware of non-Tideway crews.		Crews Clubs
9.2	Pedestrians in car park and field at risk from cars and trailers	2	1	2	Car park marshals in attendance at entrance to outer car park and field. First aid staff in attendance. Duty of care of competitors to each other.		All



# Weather and Stream Parameters

	HAZARD	S	L	R	(See explanation at head of the table) CONTROL	RRR	MONITOR
<b>10 – ADVERSE WEATHER (Also see Weather &amp; Stream Parameters below)</b>							
10.1	Wind against tide, high winds, poor visibility	3	3	9	Should the conditions put the competitors at risk, the Chairman of the Race Committee /Safety Advisor will take the appropriate action of suspending racing, shortening the course or cancelling the event. Weather forecast should be consulted and conditions regularly monitored.	6	PLA, Chairman of the Race Committee, Safety Advisor
10.2	Extreme heat / UV light	3	2	6	Personnel should be aware of competitors being unsuitably dressed, or with insufficient water supplies for hot weather conditions. An individual who looks as if they are in trouble should be advised to cover up, take on more water and in severe cases returned to HQ.	3	All personnel
10.3	Extreme cold/wet weather	3	2	6	Personnel should be aware of competitors being unsuitably dressed (insufficient clothing / waterproofs (particularly coxswains). Crews appearing to be suffering from exposure to be advised to layer up or return to HQ.	3	All personnel
10.4	Electrical storm	3	1	3	Pre-event check and monitor if storms are forecast (few likely at this time of year). In the event of an electrical storm, all crews to be returned to dry land, individuals to be warned about holding oars aloft (might attract lightning). Start controller and other marshals also to be brought to safe shelter (not trees by river bank).	3	Safety Advisor

## Weather and Stream Parameters matrix

	3	2	1	0	
<u>Wind Speed</u>	Force 5	Force 3-4	Force 1-2	Force 0	<u>Wind Speed</u>
Wind Direction Ebb Tide		SE	SE		Wind Direction Ebb Tide
Wind Direction Flood Tide		NW	NW		Wind Direction Flood Tide
<u>PLA Flag Status</u>	Red	Yellow		Green	<u>PLA Flag Status</u>
<u>Precipitation</u>	Take Action	Be Prepared	Be aware	None	<u>Precipitation</u>
<u>Air Temperature</u>	<2C	<4C		>8C	<u>Air Temperature</u>
<u>Visibility/Fog</u>	< 200m	reduced		Good	<u>Visibility/Fog</u>
Lightning	Take Action	Take Action	Take Action	Take Action	Lightning

Any parameter that meets the column 3 criteria will mean the event is cancelled.

Other columns show the perceived risk level to the event, severity increasing by column number. Any combination of factors may mean restrictions are put on the event escalating to cancellation if necessary.



**Wind Speed** <http://www.metoffice.gov.uk/public/weather/warnings>

The regatta will be cancelled or delayed if the wind is forecast to be Force 5 (20mph) or above, below that the wind speed will be looked at in combination with wind direction air temperature and rainfall.

**Wind Direction** <http://www.metoffice.gov.uk/public/weather/warnings>

Wind against tide at various parts of the events course. Generally NW against the flood or SE against the Ebb. Difficulty in marshalling will also be considered.

**PLA Flag system** <http://www.pla.co.uk/>

Will be monitored before the event for any trends. The regatta will not run on a Red Flag and some events for smaller boats or juniors may be withdrawn by the race committee if there is a yellow flag.

**Precipitation** <http://www.metoffice.gov.uk/public/weather/warnings>

Using the Met Office warning system to consider the air temperature and wind speed along with rainfall as to whether athletes should be expected to wait sometime before starting and the risk of exposure/hypothermia, particularly amongst younger competitors.

**Air Temperature** <http://www.metoffice.gov.uk/public/weather/warnings>

This needs to be considered along with wind speed (wind chill) and rainfall as above. Looking at wind chill factor charts and given a possible maximum wind speed of 20mph, 4C is the level at which wind chill becomes a factor.

**Fog** <http://www.metoffice.gov.uk/guide/weather/severe-weather-advice/fog>

Looking at the Met Office web site for a definition of dense fog to get the 200m. Essentially if Putney Town RC or Chiswick Bridge are not clearly visible then the racing is delayed until it clears.

**Lightning**

Any lightning event means immediate cessation of racing and all boats, including umpires and safety to come ashore. Racing may not recommence unless 30 minutes have elapsed since the last visible occurrence of lightning.