

# OKI 24 Hour Race

## Risk Management Plan

### Context

Venue:	Sylvan Park, Lake Pupuke
Organising Authority:	Murrays Bay Sailing Club Inc
Competitors:	Experienced sailors ranging from youth to masters
Dependency:	Low to medium
Extent of Activities:	Manage the movement of volunteers and the transport of equipment, the environment in which the sailors rig and launch, the activities of the sailors and manage the impact of our activities on the general public and environment.

## The Risk Management Process

### 1) Causal Factors

The first step in our risk management program is to identify what can cause a risk to health and safety or the environment.

(a) Equipment

(b) Environment

This category focuses on the venue and surrounding environments which are utilized by participants, and in some circumstances, the general public.

(c) Personnel

This category includes support personnel, officials, participants, parents, spectators and general public who may be in the vicinity of our actions.

### 2) Various environments involving hazards may include

(a) Travel - Commuting

(b) Pre and post sailing

(c) Launching and retrieving

(d) On the Water

### 3) Risk Assessment

Having identified the risks involved in our activities we assess them in terms of their likelihood of occurrence and the seriousness of the consequences arising. Each identified risk is rated. These ratings describe:

1. the likelihood of the risk occurring (likelihood);
2. the loss or damage impact if the risk occurred (severity);
3. the priority, or degree of urgency required to address the risk.

In order to systematically assess the risks identified in the first stage of the process, we apply the risk rating scales set out below in Tables 1 – 3. The risk rating scales will allow identification of risk management priorities and actions.

#### 4.1) Likelihood

The likelihood is related to the potential for a risk to occur during the event.

Table 1: Likelihood Scale

Rating	LIKELIHOOD - The potential for problems to occur for the duration of the contract
5	ALMOST CERTAIN: Will probably occur
4	LIKELY: High probability
3	POSSIBLE: Reasonable likelihood
2	UNLIKELY: Plausible, could occur
1	RARE: Very unlikely but not impossible, unlikely.

#### 4.2) Severity

The severity of a risk refers to the degree of loss or damage which may result from its' occurrence.

Table 2: Severity Scale

Rating	POTENTIAL IMPACT In terms of the objectives of the organisation
5	CATASTROPHIC
4	MAJOR
3	MODERATE
2	MINOR
1	NEGLIGIBLE

Having assessed each risk in terms of its likelihood and severity we are in a position to prioritize the risks to assist in the decision making of what action is warranted to manage the risks (where possible).

4.3) Risk Priority

The risk priority scale determines the nature of the risk and the action required. They are indicators to assist in understanding the urgency and level of attention required from any given area of hazard. By adding the Severity rating score to the likelihood scale a ranking score of priority will be created.

Table 3: Risk Priority Scale

Rating	
10/9	Extreme risks that are likely to arise and have potentially serious consequences requiring urgent attention
8/7	Major risks that are likely to arise and have potentially serious consequences requiring urgent attention or investigation
6/5	Medium risks that are likely to arise or have serious consequences requiring attention
4/3	Minor risks and low consequences that maybe managed by routine procedures
2/1	Use this to note a risk that does not apply to your organization

4.4) Nature of Management Strategy

When managing risks there are 3 ways to help prevent risk, it is possible to Prevent the risk, Isolate the risk or minimize the risk. The choice here is to choose a style that most effectively and practically manages the issue.

- Example; If there was a steel bar sticking up out of a launching ramp.....
- Prevent; Cut the steel bar out, or launch somewhere else
- Isolate; Put a road cone over the steel bar to stop people walking into it, or rope it off
- Minimize; In a briefing make everyone aware of the steel bar and to avoid it

## LAND BASED RISK AROUND SYLVAN PARK, ROAD AND SURROUNDS

Risk	Likelihood	Severity	Priority	Action	Who (may be delegated)	When
Insufficiently informed competitors/supporters	4	2	5	The results tent (tent on the main level area in front of the kitchen kiosk/toilet block) will have a <b>main event information board</b> , including directions to the Kitchen Kiosk for emergencies (15m away). A <b>PA system</b> audible across the main site will be available for race coverage and important safety announcements, including lost children.	Duty Officer	Initial briefing and throughout event
Waste not managed in an environmentally responsible way	3	2	5	Rubbish and recycling options provided to segregate waste, Waste Management contracted to dispose of the waste responsibly.	logistics person	Initial set up and monitored throughout event
Fuel / oil spill	2	3	5	Fill tanks at gas station. Wipe up any spillages	Duty officer - Logistics team	Throughout event when refuelling
Gas leak or explosion - BBQ	1	5	6	Check all connections. Call 111 Fire in the event of explosion. First aid as required	Duty Officer- logistics team	Immediate
Tripping and sharp hazards.	3	3	4	Ensure all ropes, guys, electrical leads are placed in areas where tripping hazard is removed or minimised. Use safety tape if required Tent pegs to have brightly coloured caps. First Aid kits to be available at PRO Caravan and kitchen	Duty Officer – logistics team	Regularly through day
Sailors, Supporters or Public require medical assistance or other incident response	4	2	4	Report to the Kitchen Kiosk building on the Sylvan park reserve which will be clearly identified. The Kitchen is manned 24hours by rostered MBSC volunteers who will have warm food and drink available for sailors throughout the 24 hour period. Kitchen staff will complete missing children and health and safety incident forms as per the MBSC /Oki H&S documents as appropriate and these will be followed through to ensure proper conclusion of any events by the OKI committee. Kitchen volunteers will be able to provide basic first aid and call PRO or emergency authorities as required. I  Kitchen volunteers will be able to assist or arrange taking the casualty to A&E at North Shore Hospital (approx. 5mins away). If any incident is For serious incidents or if in doubt, emergency services will be called (dial 111). The location is Sylvan Park Reserve Lake Pupuke.	On duty kitchen kiosk team – first aid person	As required

Risk	Likelihood	Severity	Priority	Action	Who (may be delegated)	When
Lost Children	2	4	4	Lost people should report to the Kitchen Kiosk building on the Sylvan park reserve which will be clearly identified. Parents or guardians should report to the Kitchen in the event of losing a child where the child/dependent will be kept safe and reassured until the parent/guardian is found.	On duty kitchen kiosk team	Information Pack and Briefing
Danger to swimmers with water environment and presence of lake weed	2	3	6	Emphasise to entrants and supporters in information pack and briefing	Duty officer	Information Pack and Briefing
<b>Kitchen</b>						
Fire in kitchen	1	5	6	Keep flammables away from hotplates. Do not leave cooking unattended. Check location and validity of fire extinguishers. Call 111 fire. Clear kiosk.	Kitchen crew	When cooking underway
Waste food - vermin etc	5	1	6	Leave all waste in correct rubbish bins	Kitchen crew	At end of day
Food storage	3	1	4	Ensure all food is stored as required	Kitchen crew	At end of day
Electrical items left on	1	3	4	Check all electrical items are turned off	Kitchen crew	At end of day
Burns from hot water or cooking surfaces	1	2	3	Cool skin under cold tap for minimum 10 mins Apply burn cream or send to emergency clinic	Kitchen crew	Immediately
Sunburn	4	1	5	Provide suncream on counter. Administer burns cream to sufferers	Kitchen crew	Start of day and as required
<b>Road and Parking areas</b>						
Danger to pedestrians on roads and parking areas	2	5	7	Cones as required to smooth traffic flows Parking warden with hi-vis jacket available during setup time	Duty Officer	Start of day
Incorrect parking danger and annoyance to visitors and neighbours	3	4	7	Police incorrect parking of cars and trailers Reinforce at Briefing	Duty Officer and Parking marshal	Start of day and briefing
Parking on grass reserve	3	1	4	If wet, protect the reserve grass by locking the gate and placing parking wardens in car park and main park entrance.	Duty Officer	Start of day

## SUPPORT BOAT LAUNCH AND RETRIEVE

Risk	Likelihood	Severity	Priority	Action	Who (may be delegated)	When
Outboards fail to start	1	2	3	All outboards to be run prior to exiting the Murrays Bay clubhouse	Logistics team	Start of day
Safety equipment on board	2	2	4	List of required equipment to be attached to boat – including knives.	Logistics team	Season start
Radios to be charged overnight	1	1	2	All radios to be charged prior, and two charging stations located in caravan.	Logistics team	end of day
Risk to pedestrians when launching and retrieving	1	4	5	Vehicle drivers to seek assistance	Vehicle driver and logistics team	Start and end of race

## SAILOR LAUNCH AND RETRIEVE

Boats/trailers blocking access	4	1	5	Monitor access ways and move offending items	Sign in/out team	Throughout race
Booms swinging or boats tipping and hitting unsuspecting people	4	3	7	Keep rigged boats in group together allowing room for passers-by to walk	All MBSC support team	Start and end of race

## ON WATER SAILING

Equipment						
Collision	3	3	6	Safety boats to ensure sailor safety and treat as required by removing sailor and transport to shore and medical treatment as required.	Safety boat crew	Throughout
Sailor becomes trapped under boat	1	5	7	Rescue crew act quickly to free sailor. Safety boats carry knives in sheaths so sailor can be freed ASAP - serious risk of being trapped under boat.	Safety boat crew	Throughout
Patrol boat runs out of fuel	2	3	5	<b>Safety boat crews to monitor at the start of each roster change over.</b> Replace near empty tanks with full one located next to sign on/off tent	Safety boat crew	Throughout
Patrol boat breaks down	1	3	4	Crew to request assistance by radio through Race Officer on channel TBA at briefing	Safety boat crew	Throughout
Sailors are not able to be identified on water	3	3	6	All sailors must sign in/off. Whistles attached to their life jacket. At night a glow stick will be inserted in every sail. (Red for Solo). Sailors must pass through a 'gate' on every lap. Gate will be observed and boat numbers recorded by rostered lap counters in onshore caravan. Software will highlight boat numbers missing from a lap. Patrol boat 'Brin Wilson' will be anchored at far mark of course. Rostered crew will record every boat number as it round mark, and will review this for missing numbers on each lap.	Sign on/off crew, lap counting crew, safety boat crew	Throughout

Risk	Likelihood	Severity	Priority	Action	Who (may be delegated)	When
<b>Environment</b>						
Weather Conditions become dangerous due to excessive wind/environmental conditions	4	3	7	Race Officer monitors forecasts and nowcasting for warnings. Specific yachts or classes of yachts or all yachts (depending on competence of sailors by flying flag AP over H and notifying on water safety boat crews to facilitate) if required. The course lap size may be reduced to contain sailing area and associated risks as a mitigation method.	Race Officer	Before race and hourly
Lightning	1	3	7	Principal Race Officer will decide if conditions are unsafe and call boats off the water.	Race Officer	As required
Bad weather causes racing to be abandoned	2	3	5	Race Officer makes decision. Lag N over A for no more sailing. Safety boat crews facilitate getting yachts to shore (notified by VHF from Race Officer).	Race officer	As required
Yacht capsizes for several minutes	5	2	7	Safety boat crew to standby and offer help. If requested OR if crew appears distressed or incapable - take action. Get crew out of water before attempting to right yacht. Rule 41 allows outside assistance and for crew to continue racing if life is threatened and no advantage gained.	Safety boat crews	As required
Hypothermia from cold	1	4	5	Remove sailor from Laser and get into rib down low out of wind. Get them ashore. When ashore cover them in jackets and clothing. Ensure sailors don't spend too long swimming in water. Rescue craft to monitor sailors for actions that indicate tiredness that may affect their safety.	Safety boat crews	As required
<b>People</b>						
Safety boats do not know their responsibilities	2	4	6	Race Officer to roster boats to sectors of course and brief crews. Crews read this safety matrix to understand their role. Safety boat crews ending their shift to brief incoming safety boat crew	Race officer Safety boat crew	Event safety boat briefing and during shift hand over
Communication breakdown to safety boats from shore base	1	2	3	VHF Channel 77 to be used, radio checks to be done each crew change over, radios to be kept charged and spares on hand	Race officer and boat crew (radio checks). Sign on/off crew to monitor charge state	Throughout
Incorrect use of radio causes misunderstood communications	3	1	4	Safety boat crew to familiarise themselves with radio operating procedures and pro words and use correct calling procedures <a href="https://www.maritimenz.govt.nz/commercial/documents/Radio-Handbook.pdf">https://www.maritimenz.govt.nz/commercial/documents/Radio-Handbook.pdf</a>	Safety boat crew	At all times using the radio

Risk	Likelihood	Severity	Priority	Action	Who (may be delegated)	When
Sailors do not ingest enough food and water	3	2	5	Food vouchers are supplied as part of entry. Sailors be prepared. Always have food and water with you	Sailors	Briefing
Yacht is damaged and cannot be repaired	4	3	7	Advise the Race Officer. Get the sailor to shore as a priority. Make sure you get an acknowledgment	Safety boat crews	As incident is discovered
Sailor is incapable of resuming sailing – too tired, injured or sick	1	5	5	Advise the Race Officer. Take sailor ashore immediately. Tow boat to shore.	Safety boat crews	As required
Strong wind incapacitates several yachts	1	4	5	Take sailors ashore immediately as a priority if they are in danger and leave boats (they are contained in the lake and can be retrieved later)	Safety boat crews	As required
Yacht is found with no crew on board.	1	5	10	This is extremely serious. Look for signs of sailor being under the yacht or slightly up wind. Look for yellow ribbon. If no sign of sailor report to Race Officer. Make sure you get an acknowledgement. Immediately start search upwind of yacht. Race Officer to call in search support from other safety boats and check sign off / parents etc. Race Officer to consider abandoning race and send yachts ashore (N over H). Largest rescue boat to take control and organise a grid search. Contact Coastguard in case helicopter search is necessary. advise CG which VHF channel is being used. When sailor is located stand down searching boats	Race officer/safety boat crews	Immediately as incident is discovered
Solo sailors additional risk due to fatigue	3	3	5	As per other risks. There must be a primary support person for each solo sailor on shore and emergency contact details with race entry. There must also be a solo sailor support rib on the water or TBD with race committee. A small food and water rib will be anchored for all solo sailors to access. Solo sailors will have an additional briefing. Red lights on solo boats will identify solo sailors to rib crews for extra support.	Race officer/safety boat crews	Before event (preventative) then as per other risks



Risk	Likelihood	Severity	Priority	Action	Who (may be delegated)	When
<b>Pontoon and Changeover area</b>						
Sailors changing over forget to sign on/off	3	3	6	Every sailor coming on and off the water will be identified and recorded by the pontoon marshalls If they are apparently not in fit condition or their clothing is not adequate, they will not be allowed on the water.	Pontoon Marshall Sign on/off crew	As required
Sailor is incapable of resuming sailing – too tired, injured or sick	2	5	7	Pontoon Marshall rostered will ensure sailors showing signs of fatigue are kept off the water until their condition improves	Pontoon Marshall Sign on/off crew	As required
Tripping/slipping on pontoon	2	3	5	Ensure pontoon is well anchored and pegs well marked. Synthetic grass carpet to be placed on adjacent paving to avoid slipping Pontoon Marshall to ensure pontoon is used in a safe manner by all participants and supporters.	Pontoon Marshall	Setup and as required

#### RELEVANT EMERGENCY CONTACT NUMBERS

New Zealand All Emergency Services 111

VHF Emergency Channel 16

Regatta Channel VHF 77

Coastguard contact: VHF channel 16

Takapuna Fire Station 09 440 9594

Takapuna Police Station 09 488 6200

Race Officer David Stanton 021 288 4544

Commodore Jane Pilkington 027 676 0260

#### Process for significant emergency/incident;

1. Advise Principal Race Officer
2. Principal Race Officer to arrange emergency services
3. Principal Race Officer to nominate 1 person to handle injured person and stay with them
4. Nominated person to contact others (family etc.) as directed by Principal Race Officer

#### Rescue of Injured sailor Emergency;

1. Get sailor out of water and into rib (first aid, CPR if necessary)
2. Contact PRO immediately, and give; i. sailors name ii. injury iii. your location relative to the course
3. Leave sailor's boat and get sailor ashore immediately.
4. Contact PRO with details of capsized boat.

### **Pre-launch Check**

- Tubes are properly inflated
- Bungs are properly fitted
- Propeller looks good
- Adequate fuel and spare fuel
- Anchor and line
- Lifejackets for every person on board
- VHF radio channel 77
- Rescue tape (to tie to boat if sailors removed)
- Second form of back up communication. (e.g. cell phone in water proof case)
- Tow Rope

### **Rib Use guidelines;**

- Maintain constant visuals, understand right of way rules
- Keep speed under 5 Knots except in an emergency
- Where lifejackets whilst afloat
- Use a kill cord on leg at all times for tiller steered boats or on all boats if being operated by one person
- Monitor VHF channel 77 continuously
- Call Race officer to do a radio check
- Keep boat wake to a minimum as it is not possible to remain outside the course on the lake or maintain safe assistance at night

Any mechanical issues contact Doug Tilsley, Club Captain.

### **Launching of RIB on the lake;**

- Keep a constant look out for sailors and public
  - Check bungs in, battery on
  - Check lake level and launching spot – area in front of the Pupuke Boating Club is best.
- May need to launch on an angle so the stern of the boat does not dig in to lake bottom.
- Store trailer at far end of Sylvan Park launching area.

### **Retrieving RIB; (everybody working together will make this simple)**

- Repeat of launching – usually a team will do this – be part of the team.