

# **HAMILTON YACHT CLUB**

## ***RISK MANAGEMENT 2016***

### **Introduction**

This document contains the risk management guides and tools for sailing activities at Hamilton Yacht Club. It is a compilation of resources developed over a number of seasons in response to the growing recognition of the need to explicitly manage risk in recreational environments.

The document is a compilation of a number of different resources, some of which are use separately, so there is some duplication of content, but hopefully no inconsistencies.

**Hamilton Yacht Club**  
**2016**

# HAMILTON YACHT CLUB

## *Risk Management Plan*

### INTRODUCTION

There is a degree of risk associated with sailing and volunteering at Hamilton Yacht Club (HYC). The club does its best to look after members and guests involved in club activities by anticipating and preventing possible or harm or injury to participants. However, yacht racing involves rigging up and operating a racing dinghy surrounded by others doing the same thing. The club is a learning environment – for fledgling sailors, patrol boat skippers, race officers and others. As a club, we need to find a balance between letting members learn by their mistakes and maintaining safe standards. A culture of anticipating problems, looking out for your self and others contributes to an environment of safety.

### WHAT CAN GO WRONG?

HYC's sailing activities have identifiable areas that need to be attended to consistently. Any variation in them can affect the risk to participants and their enjoyment of the club's activities.

#### Governance

HYC is an Incorporated Society. Its activities are run for members, by members who acquire the necessary skills in race management, patrol boat rescue, regatta management in addition to the general skills of maintaining a club house and membership. HYC's skill base and ability to manage some risks varies with the availability and ability of its members. Roles and responsibilities for the season's activities, assigned and published pre-season, cannot always be adhered to as the season progresses. Members who come forward to run the club, or are prepared to cover and assist on an ad hoc basis, contribute to the "reliability" of our club safety environment.

#### On Land Risks

- Parking, Rigging area and Club House activities  
Boats are stored in lockers at the club, or brought by road. They are unloaded and rigged with other sailors doing similar things. The main risk is in being hit by masts, booms, sails etc as they are assembled parked in the rigging area or on launching and retrieving them. Risks are reduced by physical separation of boats, rigging them head to wind, securing them to trolleys. Launching must be done in an orderly fashion.

#### On the water activities

- Race Management  
Sailing is an independent, largely unsupervised activity. Racing is governed by the Racing Rules of Sailing issued by an international body. Sailors are expected to have a working knowledge of the rules, but this can vary with novices. Races are controlled by a Race Officer who is responsible for a range of on-water activities - setting the race course, starting and finishing the races and assisting disabled competitors by directing the Patrol Boats. Race Officers are encouraged to attend Yachting New Zealand Race Management Seminars.
- Training  
Training activities are supervised to a level appropriate to the level of sailing ability and the prevailing weather conditions.
- Patrol Boat Service  
HYC provides up to three patrol boats manned by club members with appropriate power boat experience, or trained by the club. Patrol boats assist disabled competitors to shore and assist with capsizes at the request of the skipper or Race Officer. In general, Lake Rotoroa is a low risk environment – relatively shallow, completely enclosed water, surrounded by good access. If a strong wind capsized most of the fleet, patrol boat resources would be overwhelmed and competitors would be retrieved from the lee shore.

### WHEN THINGS DON'T GO AS PLANNED – MONITOR AND REVIEW

- HYC has developed daily operating procedures that provide check lists for the various elements that make up a day's racing. We recognise that these will need to evolve and change. A Start/Finish Tower Communication/Risk Management log book is a means of identifying daily incidents and recurring problems in need of attention.

EMERGENCY PHONE NUMBERS			
Hamilton Police	858 6200	St Johns Ambulance	8477070
Traffic	*555	Waikato Hospital	839 8899

# Hamilton Yacht Club

## Risk Assessment

This section is based on a resource put out by the Victoria Yachting Association, made available through Yachting New Zealand. It allows a more thorough and detailed assessment of all manner of risks and their possible consequences.

Each identified risk must be rated. These ratings describe:

1. the likelihood of the risk occurring (likelihood); and
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, the risk rating scales set out below in Tables 1 – 3 are applied. These risk rating scales provide a way to rate identified risks and then set risk management priorities.

### 2.1 Likelihood

The likelihood is related to the potential for a risk to occur over an annual evaluation cycle.

**Table 1: Likelihood Scale**

Rating	<b>LIKELIHOOD</b> The potential for problems to occur in a year
A	ALMOST CERTAIN: Will probably occur, could occur several times per year
B	LIKELY: High probability, likely to arise once per year
C	POSSIBLE: Reasonable likelihood that it may arise over a five-year period
D	UNLIKELY: Plausible, could occur over a five to ten year period
E	RARE: Very unlikely but not impossible, unlikely over a ten year period

### 2.2 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	<b>POTENTIAL IMPACT</b> In terms of the objectives of the organisation
A	CATASTROPHIC: Most objectives may not be achieved, or several severely affected
B	MAJOR: Most objectives threatened, or one severely affected
C	MODERATE: Some objectives affected, considerable effort to rectify
D	MINOR: Easily remedied, with some effort the objectives can be achieved
E	NEGLIGIBLE: Very small impact, rectified by normal processes

Assessing each risk in terms of its likelihood and severity means risks can be prioritised to decide what action is warranted to manage the risks (where possible).

### 2.3 Risk Priority

The risk priority scale determines the nature of the risk and the action required. They are indicators to assist in deciding what action is warranted.

**Table 3: Risk Priority Scale**

		IMPACT				
		A	B	C	D	E
L I K E L I H O O D	A	Extreme (1)	Extreme (1)	Major (2)	Major (2)	Medium (3)
	B	Extreme (1)	Extreme (1)	Major (2)	Medium (3)	Minor (4)
	C	Extreme (1)	Major (2)	Major (2)	Medium (3)	Minor (4)
	D	Major (2)	Major (2)	Medium (3)	Minor (4)	Minor (4)
	E	Medium (3)	Medium (3)	Minor (4)	Minor (4)	Minor (4)

**Key:**

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

Once a risk priority has been determined the HYC can consider the level of risk treatment and action required for each risk.

### 3. Risk Treatment (action plan)

This stage is all about identifying and trying out manage risks identified as posing a real risk to participants. Ideally HYC would out a variety of treatment strategies and then consider each strategy in terms of its effectiveness and implementation, but pragmatically, HYC has modified the strategies listed in the tables at the end of this document.

### 4. Monitor and Review

HYC realises the importance of reviewing its risk management plan at the end of the competition, activity, program or season. The club accepts that the risk management plan should be a fluid document which is regularly updated to take account of changes within the club.

Our initial strategy will be the implementation of a Start/Finish Tower Communication/Risk Management log. This will ensure a paper trail and the continued evaluation of the risk management plan in light of our documented experience.

HYC's risk management plan cannot remain static. Risks can change according to changes in the law, development of safe practices and techniques, and developing technology in the sport of sailing. Constant evaluation and updating must be done to take account of developing trends and the organisation's own experience.

## **5. Communication**

It is essential that all club members and participants in club programs are aware of the risk management program and are consulted in its development, implementation and evaluation.

Membership of yacht clubs is constantly changing and as such the clubs should ensure that new members are introduced to the risk management policy and obligations as part of their induction into club life. Similarly, entrants in competitions and races who are not members of your club should also be made aware of the club's risk management procedures and any rules with which they must comply.

### **Hamilton Yacht Club**

Potential problem	Likely?	Severe?	Risk	Treatment	Resources	Responsible person	Time frame
<b>Environmental</b>							
Fire danger resulting from smoking near fuel	E	A	3	Erect 'No smoking' signs	Signs	Club Captain	Annual check
Fire danger from spilt fuel.	B	A	1	Supply mop up system - sand etc	Sand etc	Club Captain	Monthly
Injury resulting from slippery steps and ramps	B	D	3	Clean slime regularly. Erect warning signs	Brooms	Club Captain	Monthly
Injury resulting to both sailors, officials and public from booms swinging in the breeze	A	D	2	Group boats being rigged in a bunch to discourage spectators walking through		Beachmaster	Daily
Cuts from broken glass on beach	C	D	3	Remove dangerous items, contact HCC.	Bins	Club Captain	Monthly
Traffic accidents in vicinity of clubhouse	D	A	2	Set out cones etc to slow traffic. Indicate safe areas.	Cones / flags / signs	Duty officer	Daily
Injury to members from lifting heavy boats, patrol boats, etc	C	C	2	Supply suitable tackle / lifts etc. encourage helping hands.	Trolleys etc	Club captain	Daily
Algal Bloom Conditions	C	C	3	Monitor water conditions, interpret advice received from Hamilton City Council. Cancel or postpone sailing programme. Deploy hoses to wash down sailors, Contact members	Hoses	Duty Officer	When advised by Hamilton City Council.
Arsenic in Lake Sediments	E	E	4	Mercury known to exist in lake sediments	Hoses, Showers	Duty Officer, Training Officer, Risks Register	Annually
<b>On Water</b>							
Anchors puncturing RIBs	B	C	2	File down points		Club Captain	Annually
Damage or injury resulting from untrained rescue boat operators	B	B	1	Document all training Roster experienced and inexperienced volunteers together		Training Officer	On going
Sailors at risk because yachts launch without rescue boats in attendance	A	C	3	Discuss at briefing. Beachmaster to control		Race Officer	Daily
Chaos in the event of a disaster on the water.	E	B	3	Prior training for a search and rescue plan	Videos/ handouts	Safety Officer	Annually
Collisions between boats resulting in damage or injury	A	D	2	Train sailors in give way rules. Avoid crowded starts and mark roundings.	Rule books	Coach	Monthly
Poor radio contact	A	D	2	Service radios - have spares	Spares	Safety Officer	Daily
No lifejackets, tow ropes, bailers, wire cutters, survival blanket, yellow ribbons	B	D	3	Safety Officer ensures they are in boats	Check list	Safety Officer	Daily
Poor maintenance results in insufficient rescue boats or breakdowns afloat	C	D	3	Establish maintenance schedules and responsibility roster	Maintenance list	Boatmaster	On going
Patrol craft exceed speed restrictions when not an emergency	C	E	4	Include speed restriction information in training	Copy of Regulations	Safety Officer	6 monthly
Dangers to employed coaching staff - OSH	B	C	2	Ensure coaches are properly advised of safety	Handouts	Chief coach	Each training

				issues- also new requirements on water. Make sure they are familiar with Club procedures - give them documentation			session
Danger to swimmers in water near launching area	D	D	3	Beachmaster should patrol beach when boats are returning in fresh conditions		Beachmaster	As Required
Danger to sailors when weather turns bad - abandoning racing	A	B	1	Provide to Race Officer a copy of Yachting New Zealand policy as outlined in Race management manual. The club must also have its own policy so that Race Officer does not appear biased.	RM manual	Sailing secretary / Chairman of sailing Committee	Beginning of season
Fire on board committee or rescue boat	E	C	3	Ban smoking on board. Fire extinguishers. Adopt ventilation procedure for boats with gas.	Signs	Boat master	Annually
Special risks to children	A	C	2	Children need special care. Parents should be made aware of any such risks and should always sign entry forms on their behalf particularly relating to release of Club's responsibility. Race Officials must be aware that they are catering for children and might need different care	Hand - out	Registration clerk	Daily for visitors
Sailors missing from finish sheets	A	B	1	Sailors should be monitored while they are afloat and recorded if they return to shore early, and should be recorded as they finish. Anyone missing from the list should be treated as missing until located. Numbered beach trolleys act as a very good first warning	List of competitors	Duty Officer	Daily
Seasickness prevents rescue boat crews from operating	C	D	3	Advise Race Officer if boat returns to shore			
Danger from Propellers of rescue boats	A	A	1	Provide propeller guards if practical. Train rescue crews to engage neutral when near sailors in the water		Boatmaster	Ongoing
Collision with rocks and other underwater obstacles in sailing area	E	E	4	Display chart showing dangers	Charts	Club Captain	Annually
Hypothermia in either sailors or rescue boat crews	E	B	3	Get affected person clear of cold water. Wrap in warm clothing or survival blanket and get to shore as quickly as possible. Alert shore crew. Do not expose to excessive heat. Provide warm drink. Do not supply alcohol	Handouts	Training officer	Annually
Sunburn danger to sailors and officials.	A	E	3	Supply bulk sunscreen at clubhouse		Club Captain	As Required
Injury or damage resulting from collision between any boats, whether competing yachts or otherwise	B	C	2	All Patrol boats to be equipped with tow lines elementary and radios. Complete MSA accident form in serious cases.	List	Safety Officer	Daily
Injury or damage resulting from collisions	B	C	2	Consult with other clubs using the same area on	List of Phone	Duty Officer	Daily

between competing yachts round marks in opposite directions				the same day	numbers		
Danger from falling equipment and boats stored high up.				Where possible supply steps. Fit warning notices in racking areas.		Club captain	Annually
<b>Pre and Post sailing</b>							
Theft of equipment and boats.	B	E	4	Discuss at briefing. Encourage sailors to take loose equipment home. ?Fit security clamps to trailers. Ensure someone has the job to be last out and lock the door.	Alarms	Race officer	Each event
Damage to equipment and injury during launching and retrieving in on shore winds	A	D	2	Coaching the correct procedure. Organise beach helpers- advise sailors they will be available	Change of clothes	Coach Beachmaster	Twice yearly Daily as required
Bad weather causes multiple capsizes and rescue problems.	B	C	2	Always obtain a quality forecast at start of day. Warn Race Officer of potential problems. Post forecast on notice board so that sailors are aware.	Phone No	Duty Officer	Daily
Failure of officials to act in accordance with safety procedures.	D	C	3	Thorough training in advance. Warning to official if a problem occurs. Removal of official from such duties if behaviour persists		Chairman race committee	As Required

# HAMILTON YACHT CLUB (INC)

## Hazards Register

*Users of the clubhouse and its environment are asked to take care with the following hazards:*

- **Wet Floors:** Sailors in wet gear can create slippery surfaces on our changing room and clubhouse floors.
- **Launching Ramps:** Biological material building up on launching ramps can make them slippery.
- **Launching Patrol Boats:** Access to the slipways and the boat shed is across the walkway. Please ensure the safety of pedestrians by stationing lookouts around reversing vehicles.
- **Rigging Areas:** Boats and their booms may move about suddenly, especially in windy conditions.
- **Small Children:** The yacht club facilitates a water based recreational environment. Small children must be supervised at all times in the club area.
- **Stairs:** Take care on the stairs to the balcony viewing area.
- **Thefts:** Occasional thefts of gear left in the clubhouse and from cars in the parking area have occurred. Secure all valuables, or leave them at home.
- **Contaminated Site:** Lake Rotoroa was sprayed with an Arsenic containing herbicide to control aquatic weed in the 1950s. Arsenic remains present in the lake sediment, albeit in very low levels. No cases of ill health have been reported due to arsenic. Sailors in contact with lake sediment should ensure that they wash or shower to remove it. Swimming in the lake is now discouraged because of bacterial levels from duck faecal contamination.
- **Algal Blooms:** Under certain conditions, blue green algae may flourish in the lake, especially in sheltered, shallow down wind areas. Hamilton City Council issues public advisory notices at times of general public risk. The water quality in the main body of the lake may often remain acceptable for sailing. HYC modifies its sailing programme and advises members based on information received from Hamilton City Council

# HAMILTON YACHT CLUB

## RACE AND RISK MANAGEMENT 2016

This is a guide to race management at Hamilton Yacht Club.

HYC is run by a Committee elected at its AGM. The Race Committee is a sub-Committee chaired by the Vice Commodore and responsible for the sailing programme for the season and the individual regattas. For individual regattas a smaller RC may be formed.

### REGATTA ORGANISATION

For regattas the following functions need to be fulfilled:

**Race Committee:** Organizes the Regatta

- Issues the Sailing Instructions
- Appoints a Race Officer
- Arranges Staffing
- Committee Boat/Tower
- Patrol Boats
- Protest Panel
- Shore Liaison person
- Liaison with House Committee over breaks in sailing etc.
- Run over the “Disaster Plan”

The Race Officer needs to be identified well in advance, preferably at the beginning of the season. Staffing arrangements need to be confirmed about 10 days out from the regatta and a final briefing of staff involved 2-3 days before hand.

### RESPONSIBILITIES

#### Race Officer

The RO runs the Regatta. There are three main areas of activity for the Race Officer.

- **Committee Boat/Tower:** Starting & finishing the races, tracking/assisting the competitors, posting results etc.
- **Competitors:** Briefing them about the general conduct of the regatta, Sailing Instructions, weather conditions etc.
- **Patrol Boats:** Confirming the role of each boat and the level of preparedness needed.

#### Patrol Boat Operators

Patrol Boat Operators are responsible for their boat and its operations. Normally one or two (rarely) crew would be carried and any additional passengers only with the consent of the Race Officer. Patrol Boats must work closely with the Race Officer, the Tower and other Patrol Boats. The level of preparedness for any regatta needs to be indicated by the Race Officer at the initial briefing. Establish:

- Will a “pin end” boat be needed?
- When will capsized boats be assisted?
- What to do if an engine or VHF radio fails.
- If the engine can't be restarted, anchor the boat and radio for help, or use the international distress sign (wave your arms). If VHF radios can't be used, the Tower signal light will be used. All lights indicate a “return to base”, otherwise they indicate the end of the lake for Patrol Boat attention.
- What to do if we have “mass casualties”
- Sailors first, leave the boats.

#### Shore Liaison

For larger regattas, identify a shore liaison person to trouble shoot or identify ad-hoc resources or problems – additional tower help, substitute Patrol boat crew etc. Equip them with a VHF radio.

#### Disaster Plan

On rare occasions really strong winds can decimate the fleet and Patrol boat resources cannot always cope in this situation. The strategy is to “Leave the boats, collect the sailors”. Boats and skippers who have become separated from their craft will end up on the lee shore at one end of the lake and resources will need to be mobilised to fetch them.

# STANDARD OPERATING INSTRUCTIONS

## Hamilton Yacht Club Patrol Boats

### Introduction

Hamilton Yacht Club operates two Boston Whalers and a Rigid Inflatable Boat (RIB) for use as coach and patrol boats. Operators should note the following:

- The Patrol Boat Operator is responsible for the safety of his craft and its occupants. Any crew should behave reliably and not hinder any rescue operation.
- Adult crew should have a lifejacket available, children should wear them.
- Crew should sit on the seats provided. The bow seat may move vigorously in choppy conditions, unseating small children. Arms and legs should be inboard.
- When patrolling club racing, the requirements of the Race Officer should be thoroughly understood and adhered to.

### Patrol Boat Failure

If the patrol boat is disabled (motor dies, propeller fouled) you may need to anchor the boat and radio for help, or use the international distress sign (wave your arms).

### VHF Radio Operation

VHF Radios may be difficult to hear over the outboard motor noise. If VHF failure is suspected, verbal hails may be needed, or visual signals (Tower lights) may be used. All lights indicate a "return to base", otherwise they indicate the end of the lake for Patrol Boat attention

### Launching and Starting Procedure

#### Launching

- Open Patrol Boat Shed and select number of Patrol Boats depending upon intended activity. (HYC guidelines call for one patrol boat for 20 competitors) Whaler #1 is the Mark Laying and Committee Boat and should be launched first.
- Insert bungs – firmly, but not tightly. The plastic tends to swell in the water.
- Check Fuel. Additional fuel is kept in the boat house.
- Remove tanks from boats to refuel. They can be left connected to the motors. Refuel outside boat house to reduce spill/fire risk.
- Tilt motor up and remove the dolly wheel from the trailer before attaching the trailer to the tow vehicle. Check coupling is secure
- Drive to ramp. Check ramp access and lake walkway is clear. Take care when reversing the boat onto the ramp. Immerse the trailer until the wheels but not the bearings are in the water.
- Detach the boat from the winch and push gently off. If it does not go easily, look for a reason - it may still be tied on.
- Secure boat alongside "wharf" and park trailer or return it to boat shed.
- Launch remaining boats and secure boat shed.

#### Starting

- Ensure the motor is in the correct down position and in neutral.
- Open air bleed on top of fuel tank
- With choke in, operate in-line hand fuel pump with arrow up until hard.
- Pull choke knob out and pull the start lanyard. The motor should start after half a dozen pulls. If not, push choke in and repeat. Alternatively, adjust the hand throttle on the control box.
- Push choke knob in as soon as motor starts.
- Check water flow from telltale at back of engine after starting. If there is no water flow, stop engine and have it checked
- Allow engine to warm up for two or three minutes to eliminate stalling.

Report or fix any problems as they occur. Don't leave them to someone else

A spare anchor, sharp knife and side cutters can be useful

- Shift into gear quickly. Slow shift will result in gear damage.
- Shallow water at certain lake levels and the ramp can damage the propellers.

#### On Board Equipment Check

Lifejackets - from the Start tower

VHF radios from the Start Tower. Set VHF radios to Channel 77

- Anchor and Warps
- Tow Ropes
- Tools
- Competent Assistant

## Retrieving

- Tilt Motor Up
- Check for pedestrians on the Walkway. Reverse Trailer into water until the wheel rims touch the water
- Winch up onto trailer, secure, remove bungs and return to boat house.
- Reinsert dolly wheel and position to allow water to drain. Notify any operating defects or problems to the Race Officer

## Rescue Operations

- *In the event of a mass rescue your first priority is to the sailors, not the boats.*
- *A capsized dinghy should never be towed unless it is an extreme emergency.*
- If a boat is in trouble, proceed to the location as soon as possible, but aim to stop one side or another, well away from it in order to sum up the problems before committing yourself irretrievably.
- Approach slowly. Your approach (from windward or leeward, ahead or astern) will depend on the situation. Make sure your crew knows what you are going to do. Every situation can be totally different, so experience is a huge part of becoming a good rescue boat skipper
- Keep the propeller clear and away from the sailors and the boat. Look out for ropes and gear that could foul the propeller. Switch off, or have the motor out of gear when alongside. Make sure the controls cannot be accidentally bumped.
- Keep the crew in sight at all times.
- Capsized dinghies are more easily righted if pulled head to wind. Approach the situation from upwind and have your crew hold onto or pass a rope through the bow handle. Reverse so as to position the capsized dinghy head to wind and encourage the sailor to right it. Hold it head to wind or slightly on one tack until the sailor is back in his boat. If the dinghy capsizes again, repeat the process until the boat is upright.
- All dinghies should carry a tow rope, if not, use the mainsheet attached to a solid fitting on the boat, usually the mast. A lot of weight comes on the front boats of a tow, so ensure that the front boats don't tie the boats behind to hiking straps or travellers etc.
- Take a turn around the base of the mast with the tow line and hang on to it rather than tie it, so it can be let go in an emergency.
- Tow slowly and don't stop suddenly.
- At your destination have the boats cast off the end of the tow while you make a slow turn past the drop off area.

### **Rules of Towing**

When being towed, there are five rules for rescued skippers and patrol boat operators to remember:

- Centreboard Up
- Sails Down (if requested)
- Sit Aft
- Steer Straight
- Stay Awake!

### **Trailing By Road**

Check Registration and Warrant of Fitness. Ensure boat adequately secured on trailer with a ratchet tie down to the transom to ensure adequate support for tilted engine using engine prop or a block of wood. Don't rely on tilting mechanism.

## HYC Safety Action Plan for Routine Operations

Event	Date	
<b>Staffing</b>		
<b>Race Committee</b>	<b>Patrol Boats</b>	
<b>Race Officer</b>  <b>Time Keeper</b>  <b>Signals Officer</b>  <b>Shore Liaison/Results</b>  <b>Other</b>	<b>Whaler 1/Committee Boat</b>  <b>Whaler 1 Crew</b>  <b>Whaler 2/Course Setter</b>  <b>Whaler 2 Crew</b>  <b>Smuggler</b>  <b>Smuggler Crew</b>	
<b>Duty Officer/Beach Master</b>	<b>Protests</b>	
<b>Lunches/Prizes/Other</b>	<i>Who is Responsible</i>	<b>How, When &amp; Where</b> will it be done?
<b>Race Committee Briefing</b> <ul style="list-style-type: none"> <li>• Race Committee Roles assigned?</li> <li>• List of all participants on the water</li> </ul>	<b>Race Officer</b>	<b>Tower prior to racing</b>
<b>Patrol Boat Briefing</b> <ul style="list-style-type: none"> <li>• Sufficient Patrol Boats launched and checked?</li> <li>• Rescue Boat(s) Briefed by Race Officer</li> <li>• VHF and Patrol boat failure strategies.</li> <li>• Pin End Observer required and briefed?</li> </ul>	<b>Patrol Boat Officer</b> <b>Race Officer</b>	Tower prior to racing
<b>Competitor Briefings</b> <ul style="list-style-type: none"> <li>• Course</li> <li>• Start Times</li> <li>• Starting Order</li> <li>• Laps etc</li> <li>• Other Lake Users/Movements</li> <li>• Hazards on and about the slipway or launching ramp</li> <li>• Are participants aware of signals to be used during organisation e.g. sound/flag?</li> </ul>	Race Officer	
<b>Safety Officer – Spot Check</b> <ul style="list-style-type: none"> <li>• Do all yachts have tow ropes and bailers?</li> <li>• Do all competitors have lifejackets?</li> </ul>	<i>Duty Officer/Safety Officer</i>	
<b>Following Racing</b> <ul style="list-style-type: none"> <li>• Have competitors been accounted for?</li> <li>• Recovering race marks?</li> <li>• Have rescue boat operators followed the SOP's for launching and rescue operations?</li> <li>• Any need to notify nominated persons about broken or lost equipment and boat malfunction?</li> </ul>	<i>Race Officer</i>	
<b>Identified Deficiencies??</b>		

# **PATROL BOAT CHECK**

## **BEFORE SAILING**

REFUEL? – Outside boat shed & No Smoking

WATCH THE WALKWAY!!

BUNGS IN!!

LIFEJACKETS – from Start Tower

RADIOS – from Start Tower (Channel 77)

ANCHOR AND WARP

TOW ROPE

TOOLS – from Tower

## **AFTER SAILING**

RETURN GEAR to Tower

Report Defects/Problems to Tower

### ***Patrol Boat Fuel***

***Containers of fuel are kept in the boat shed and replenished as needed.***

**Hamilton Yacht Club  
Start/Finish Tower  
Communication  
And  
Risk Management Log Book**

This book is part of the HYC Risk Management Plan.

Keeping adequate records and continued evaluation of the risk management plan in the light of such records is a recognised part of ongoing risk management.

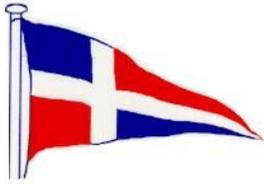
Please document accidents, incidents or concerns that could place members at risk.

To give this book a bit of life, incidents in club life should be recorded as well.

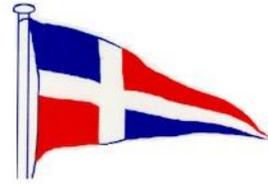
Remember the dorsal fin award at the end of year Prizegiving!

# **HAMILTON YACHT CLUB**

## **Start/Finish Tower Communication And Risk Management Log Book**



# Patrolboat Information



## Hamilton Yacht Club

HYC has 3 patrol boats. Two Whalers (#1 & #2) and one Smuggler RIB. During racing they must remain available for course alterations and/or rescues. By volunteering to be an assistant on the patrol boats you can familiarise yourself with the club powerboats.

The first name down in the Calendar of Events as patrol boat officer for the day's racing is responsible for organizing the patrol boats and their crews. That person must arrive early, open the Patrol Boat shed and select the number of Patrol Boats depending upon intended activity (HYC guidelines call for one patrol boat for 20 competitors). Whaler #1 is the Mark Laying and Committee Boat and should be launched first. It should be launched and ready for duty at least 30min before the scheduled start of racing.

### **General Instructions**

- When not attended please ensure the boat shed is secure.
- Before casting off from the jetty do an Onboard Equipment Check:
- VHF radios and Life Jackets . Set VHF radios to Channel 78.
  - Do you have a paddle, boat hook, anchor, tow ropes, shackle spanner, fire extinguisher, knife, spare kill cord and a competent assistant?
  - Insist that boat crews wear life jackets and that the skipper uses the kill cord.
- Report any problems as they occur to the Patrol Boat Officer. If possible fix them. If the problem can't be fixed, inform the Duty Officer.
- Always motor slowly when near the jetty, boat ramp, or any shore. Be prepared to tilt the engine when near the shore at low lake water levels.

### **Launching the Whalers**

- Roll the boat forward far enough to be able to tilt the engine up, the grey tilt lock lever is in the centre at the front of the motor. Flick lever up to allow engine to tilt up.
- Insert bungs (x5) - three are external on the transom and two are internal at the back of the cockpit – firmly, but not too tightly. The plastic tends to swell in the water.
- Check fuel level. Additional fuel is kept in the boatshed. Note the tanks are labelled. 91 unleaded. To refuel, remove the tank from boat and refill outside boat-house to reduce the spill and fire risk. Otherwise the fuel tank can be left in the boat connected to the motors. (note: no oil needs to be added to the fuel)
- Lift the dolly wheel up and clamp it tightly after attaching the trailer to the tow vehicle. Check coupling is secure. Check ramp access is clear. Take care when reversing the boat onto the ramp. Immerse the trailer until the wheels but not the bearings are in the water.
- Detach the boat from the winch, hold onto the bowline, and gently push the boat off the trailer. If it does not go easily, look for a reason – it may be still tied on!
- Secure boat alongside "wharf" and park trailer or return it to boatshed.

### **Using the Whaler Motors (Suzuki 25hp 4-stroke motor)**

- Tilt the engine full down (unless the lake is very low), the grey tilt lock lever is in the centre at the front of the motor. Tilt engine up a little more to take the weight off the lock mechanism, then flick lever down to allow engine to tilt down. Lower it carefully. Please be warned it is quite heavy.

- Check steering is free and kill-cord is in place. Make sure remote engine control lever is in neutral (vertical position). Lift the starting throttle lever on the rear of the remote control unit to about 30 degrees.
- Open air bleed on top of fuel tank. Pump the in-line hand fuel pump until the pump chamber is firm. Apply choke, pull starting lanyard.
- Once the engine is firing, check that the red warning light on the front of the motor goes off and that water flows from the telltale at back of engine. Slowly remove the choke and allow a warm up period of 2-3 minutes to reduce the chance of stalling. Lower the starting throttle lever back to horizontal. If at any time the light stays red or there is no water flow, stop the engine and have it checked.
- Squeeze the shift detent to allow the lever to move into forward or reverse. Always shift the lever positively from neutral to slow ahead or to slow reverse. Both an overly slow shift or the sudden application of too much throttle can damage the gearbox.
- Especially in open waters, ensure the kill-cord tie is attached securely to the driver.

### **Retrieving the Whalers**

- Turn the engine hard to port. Flick the grey tilt lock lever up then tilt the motor up to full up position. Reverse the boat trailer into water until rear sliders touch the water. Winch boat onto trailer, remove bungs and allow water to drain out.
- Remove and return radios, flags, buoyancy vests etc.
- Return to boatshed. Clean if required. A tap, hose and brush are in the patrol boat shed on the left side. Unclamp to lower dolly wheel to ground, clamp firmly again, then wind to lift trailer hitch off the car tow-ball.
- Slide the boat back into position in the shed then lift the dolly wheel onto one of the small wooden platforms, so that any water in the boat drains aft. Tilt engine down.

### **Launching the Smuggler**

- Retrieve the keys from the club tower (and return them at the end of the day).
- Before removing the Smuggler from the boat shed the engine needs to be tilted about halfway up to prevent grounding the skeg of the engine on the concrete floor.
- Roll the boat forward far enough away from the back wall to have room for the engine to tilt. Turn battery on by opening port side access panel below steering wheel and turning big red knob. Use the tilt rocker switch on the throttle lever.
- Insert bung – firmly, but not too tightly. The plastic tends to swell in the water.
- Check fuel-use the fuel cap key (on the key ring) to undo the fuel cap and the dip stick (under the driver’s seat) to measure the fuel level. Measure with the boat level and the stick vertical. It is a 60L tank. Labelled additional fuel containers are kept in the boatshed. Use the ‘Evinrude fuel’ for the The Smuggler. This is plain 96 octane unleaded fuel (it is a 2-stroke engine but the oil comes from a separate reservoir found under the engine cowling). In the boatshed there is a funnel and clear hose arrangement for filling the fuel tank.
- After attaching the trailer to the tow vehicle rotate the dolly wheel to the horizontal position. Check coupling is secure.
- Check ramp access is clear. Take care when reversing the boat onto the ramp. Immerse the trailer until the wheels but not the bearings are in the water.
- Detach the boat from the winch, hold onto the bowline, and gently push the boat off the trailer. If it does not go easily, look for a reason – it may be still tied on!

- Secure boat alongside "wharf" and park trailer or return it to boatshed.

### **Using the Smuggler Engine (50hp Evinrude E-tec 2-stroke)**

- Lower engine with tilt rocker switch on the throttle. At low lake levels there may not be enough depth at the jetty to fully tilt the engine. The minimum is to tilt down until the back edge of the plate above the propeller just goes underwater.
- Ensure kill-cord clip is attached around the ignition lock barrel and, especially in open waters, ensure the kill-cord tie is looped around the Smuggler driver's leg.
- Insert key and turn clockwise one click. There will be a single beep then the engine will do a self test, briefly lighting each of the warning lights inside the 'rev' gauge. The self test is complete when all these lights go off and the engine is ready to start.
- Start the engine by turning and holding the key one more position clockwise, like starting a car. Release the key as soon as the engine starts.
- When running, a small jet of water at the back of the engine indicates that the cooling system is working. If there is no water jet then stop the engine and have it checked.
- Shift into gear quickly but only to a low throttle setting position. Both a slow shift and sudden application of too much throttle can result in gear damage.

### **Retrieving the Smuggler**

- Tilt the motor up. Reverse the boat trailer into water until rear bearings touch the water. Winch up onto trailer, remove bungs and allow water to drain out.
- Clean if required. Remove and return radios, flags etc. Return to boatshed. Lower dolly wheel. Tilt engine about 3/4 down, so that the boat can slide back far enough in the shed. Turn the battery off. Use the dolly wheel to raise the bow up.

### **Rescue Tips**

- At a rescue your first priority is to the sailors, not their boats.
- If a skipper is in trouble, go to the location quickly. Stop within easy hailing distance so that you can clearly assess the problem(s) before committing yourself to the rescue.
- Approach slowly. Your approach (from windward or leeward, ahead or astern) will depend on the situation. Make sure your crew knows what you are going to do. The ideal approach varies, so experience is a huge part of becoming a good rescue boat skipper.
- Keep the propeller clear and away from the sailors and the boat. Look out for ropes and gear that could foul the propeller. Switch off, or have the motor out of gear when alongside. Make sure the controls cannot be accidentally bumped.

### **Towing a sailing dinghy**

- A capsized dinghy should never be towed unless in extreme emergency.
- All dinghies should carry a tow rope. The mainsheet can be used if no tow rope is available.
- Under tow the tow rope should be held in the skippers hand (not tied off) so that it can be released quickly if required.

- From the rescue boat the tow rope should pass through an eyelet at the bow of the boat under tow, then once around the mast, then to the sailor's hand. This is important for long tows and heavy weather tows.
- The patrol boat assistant should keep watch on the towed boat.
- Make sure the dinghy skipper drops the sail, lifts the centerboard, sits aft, steers to follow the rescue boat, and stays alert.
- When towing more than one dinghy in a chain take care choosing where to tie off the tow line on the leading dinghy as the loads on this line can be significant.
- Tow slowly and don't stop suddenly. At your destination cast off the end of the tow while you make a slow turn past the drop off area.

## ***HAMILTON YACHT CLUB PATROL BOAT INSTRUCTIONS***

<b>Launching and Starting Procedure</b>
<b>Launching</b>
Open Patrol Boat Shed and select number of Patrol Boats depending upon intended activity. Whaler #1 is the Mark Laying and Committee Boat and should be launched first.
Insert bungs – firmly, but not tightly. The plastic tends to swell in the water.
Check Fuel. Additional fuel is kept in the boat house.
Remove tanks from boats to refuel. They can be left connected to the motors. Refuel outside boat house to reduce spill/fire risk.
Tilt motor prior and remove the dolly wheel from the trailer before attaching the trailer to the tow vehicle. Check coupling is secure
Drive to ramp. Check ramp access and lake walkway is clear. Take care when reversing the boat onto the ramp. Immerse the trailer until the wheels but not the bearings are in the water.
Detach the boat from the winch and push gently off. If it does not go easily, look for a reason.
Secure boat alongside “wharf” and park trailer or return it to boat shed.
Launch remaining boats and secure boat shed.
<b>Starting</b>
Upright the motor! Check it is in neutral
Open air bleed on top of fuel tank
With choke in, operate in-line hand fuel pump with arrow up until hard
Pull choke knob out and pull the start lanyard. The motor should start after half a dozen pulls. If not, push choke in and repeat.
Push choke knob in as soon as motor starts.
Check water flow from telltale at back of engine after starting. If there is no water flow, stop engine and have it checked
Allow engine to warm up for two or three minutes.
Shift into gear quickly. Slow shift will result in gear damage.
Shallow water at certain lake levels and the ramp can damage the propellers.
<b>Radios and Life Jacket Check</b>
Obtain VHF radios and Life Jackets from the Start Tower. Set VHF radios to Channel 77
<b>On Board Equipment Check</b>
Radios
Life jackets - to appropriate NZ Safety Standard plus spares.
Anchor and Warp
Tow Ropes
Tools
Crew
<b>Retrieving</b>
Tilt Motor
Reverse Trailer into water until rear bearings touch the water
Winch up onto trailer, secure and return to boat house.
Remove bungs, reinsert dolly wheel and position to allow water to drain.
Record any operating defects in log or notify Patrol Boat Officer
<b>Trailing By Road</b>
Check Registration and Warrant of Fitness.
Ensure boat adequately secured on trailer with a ratchet tie down to the transom
Ensure adequate support for tilted engine using engine prop or a block of wood. Don't rely on tilting mechanism.

Hamilton Yacht Club  
**Safe powerboating near sailboats – a few tips**

- Wear your lifejacket or buoyancy aid at all times when in powerboats. Maritime Law in New Zealand and Yachting New Zealand prescriptions insist on this. We also need to set a good example to younger members as to safe boating practices.
- Wear your killcord at all times. People never mean to fall overboard, so when it happens the engine will stop if it is attached to your leg or a secure part of your clothing. This has happened at HYC!
- Keep a constant lookout when driving the powerboat. You are the give way boat and should avoid other boats or placing yourself into hard-to-give-way positions.
- On race days make sure you know the course so that you know where sailors will be sailing, which way they will go around marks and what point of sail they will be on. Get to know the basic rules of racing, ‘when boats meet’. The more the powerboat coxswain knows about the rules the better they will be able to predict what a sailor will do.
- Always look all around you before you engage gear, speed up, slow down or turn to port or starboard. Remember “steer then gear”.
- Always ask yourself “Do I have to drive this fast? Can I be driving slower?” Speed is easier to justify if there is a rescue to get to; remember people will watch your powerboat driving & pass judgement. Make sure you make sound seamanlike decisions.
- Despite your best efforts you may find yourself in a situation where the only way to avoid a collision is to rapidly accelerate away from the path of a sailboat. Turning, moving ahead or reversing at speed all come with an element of risk. Odds on you will avoid the collision. However avoiding the collision may not be possible, or the rapid manoeuvre you under-take may put you in the path of a different sailboat, and in speeding up you may well make any collision worse. The alternative to applying power to avoid a collision is to accept that a collision is imminent and act to lessen the impact. Consider the following options:
  - Turning so that the impact is not head on, either to starboard (the expected action of two boats on a collision course when not sailboat racing) or to port (if this will clearly result in the least impact).
  - Reverse to reduce the violence of the impact
  - Fending off (watch your hands and limbs for entrapment/crushing)
- Remember the bigger the powerboat, the bigger the turning circle. As such you should know your turning circle and give yourself room to turn.
- Split second decisions are not easy to make under pressure, so preventing the close quarter situation in the first place is often the ideal. “Prevent” rather than “react”.

### **Coaching Sailing from Power Boats**

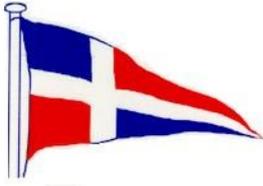
Coaching sailing sometimes requires close quarter driving so consider the following:

- When coaching on the move, and with the sailboat going to windward, try placing your powerboat just to leeward and a couple of metres astern of the sailboat. Crash tacks are more likely than gybes since boats round up as they heel in gusts, or if the sailor accidentally lets go of the tiller. If the boat does crash tack then you can steer in the opposite direction (leeward) as they turn through their tack.

- In gusty conditions, and especially with inexperienced sailors, capsizes are likely. If you are coaching from astern and to leeward, and the sail boat capsizes to leeward, you could run the sail over. Capsizing to windward is also possible especially on a run in strong conditions, on a beat when there are sudden lulls between the gusts, or with a very unstable wind direction.
- Make your decision on where to place your powerboat based on the sailor's ability, the winds behaviour, the sailboat speed (and therefore your speed), the class of sailboat, and the activity you are asking the sailors to do. Either to windward or to leeward, but not so close or going so fast that you have no time to react to the sailboat making a sudden change in direction or capsizing. Try to anticipate what problems the sailors might have.
- Coaching on the move with conversations over a rev-ing engine often end up being shouted with mis-communication possible; not the best coaching technique since your sailor will be focussing more on sailing than perhaps your words of wisdom. Consider asking the sailor to heave-to (45° off the wind with sails flapping), and talk with both your powerboat & the sailboat stationary with your engine in neutral. Place your powerboat to windward of the sailboat & hold on their shroud/gunwhale whilst you give feedback, feedforward or further instructions.
- When training on a small course consider placing yourself in the middle of the course leaving the sailors to go around the outside.
- Consider anchoring and having hand/whistle signals that bring your sailors alongside you for feedback, feedforward or further instructions. Consider placing one sailboat either side of you (if appropriate) for quicker communications with multiple boats / crews.
- If you have set a course for sailors to perform a set exercise around, consider its size and what you want to get out of the session. Too small a course with too many sailboats means a much busier sailing area for you to manoeuvre in. If however you need to practice close quarter sailing, perhaps focussing on "rights of way", then consider anchoring off out of the way or standing-off away from the busy and unpredictable "Shipping Lanes"

This list of tips is designed as a guide to help you coxswain powerboats safely around sailboats. Sailors, especially those learning to sail or race, are hard to predict at times so we hope these tips give you food for thought.

Dave Smith, John Barnard and Rob Ebert.

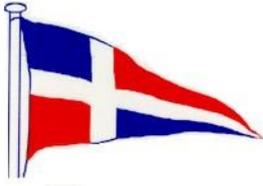


# Smuggler Equipment List

Hamilton Yacht Club

- 1 x Bung (secured in bilges drain hole)
- 1 x Stern Line / Tow Rope
- 1 x Ignition Key, Fuel Cap Key & Spare Wheel Key (kept in Tower)
- 2 x Killcords (one kept with keys & spare under Coxswain's seat)
- 1 x First Aid Kit (under Coxswain's seat)
- 1 x Knife (under Coxswain's seat)
- 1 x Toolkit (under Coxswain's seat)
- 1 x Fuel Dip Stick (under Coxswain's seat)
- 1 x Bucket (below Coxswain's seat)
- 1 x 10 metre Tow Line (in bucket below Coxswain's seat)
- 2 x Paddles
- 1 x Boat Hook
- 1 x Fire Extinguisher (under forward Crew seat)
- 1 x Sponson Pump (kept on boatshed wall next to Smuggler)
- 1 x Danforth Anchor + Chain + Warp (under forward anchor hatch)
- 1 x Bow Line
- 2 x Buoyancy Aids - from the Tower
- 1 x VHF Radio - from the Tower
- 1 x Spare Ignition Key, Fuel Key & Spare Wheel Key in Tower

**Do you need any Race Signal Flags or a horn?**



# Whaler Equipment List

Hamilton Yacht Club

- 2 x Killcords (spare under steering wheel with knife)
- 1 x First Aid Kit (under coxswain's thwart)
- 2 x Paddles
- 1 x Danforth Anchor + Chain + Warp & Container
- 1 x 10 metre Tow Line
- 1 x Fire Extinguisher (under coxswain's thwart)
- 1 x Knife (under steering wheel with killcord)
- 1 x Boat Hook
- 1 x Bucket
- 1 x Toolkit (under coxswain's thwart)
- 5 x Bungs (kept in engine well)
- 1 x Bow Line
- 2 x Stern Line / Tow Rope
  
- 2 x Buoyancy Aids - from the Tower
- 1 x VHF Radio - from the Tower

**Do you need any Race Signal Flags or a horn?**