

SSC Patrol Boat training.

“A PB duty is on the one hand, a great way to spend a couple of hours bonding with your crew and drinking in the best that nature has to offer.....

On the other hand it can quickly turn into a confusing fast moving battle with everything at stake.

The nature of an emergency is such that you can't prepare to cope with one scenario, you have to be able to cope with a variety of scenarios, possibly all coming at once.

SO YOU NEED TO BE AS PREPARED AS YOU POSSIBLY CAN. But you only have three or four sessions a year to perfect your duty. So we need to be as prepared and rehearsed as we can and take pride in that preparation.”

The Preparation and Completion Procedure for PB Duty

Arrive at least 1 hour prior to the Briefing

Grab the laminated BEFORE DUTY CHECK LIST and ensure you complete each bullet point.

CONSULT WITH YOUR RACE OFFICER OF THE DAY in a duty briefing (usually in the Tower);

Race: What is the proposed race of the day,

- You will need to know the nature of the race, the start sequence, whether the fleets start together or separately.
- If it's a pursuit race you will need to be close to the fleet at the finish to help the RO judge the order of the finishers.
- A long distance race may require the red rib to deal with larger waves in the channel.
- Do we need the deep water anchor?
- Do we need to take on board refreshments?
- What range of fuel will be needed?

Weather: Is the wind forecast to increase or decrease through the duty, what gusts can you expect? Are any squalls forecast? Which direction will the wind be blowing at the start and for the duration of the duty.

The weather will determine the following:

- Which patrol boat to take?
- Your approach to the launch and retrieval of the boat.
- What clothing to wear? Crew should be ready to enter the water if required.
- Hot or cold drink?
- Sun screen, sun glasses, sun hat?

Tide: Be aware of the expected duration of the tide.

- Make a note of the time that you have enough water to launch and calculate the duration to high tide, this will help you assess the latest time you can safely return to shore and get on the trailer
- You should also know whether you are putting to sea in a Spring tide or Neap tide so you can assess tidal flow effect on your boat (if you have sight of a mark, pole or buoy, you can also check tidal flow).

Course: Discuss the course the RO has set and let them brief you on their intention for each leg of the course.

- How many marks do you need to take out and what size; the bigger the course, generally, the bigger the marks.
- Does the RO want a windward mark or a few degrees off, do they want you to avoid setting a dead downwind leg?

Competitors: Assess the competency of the Helms and Crew.

- Help the RO by assessing the weather, the number of boats sailing and the competency of the sailors to determine whether one PB is sufficient
- Identify who are likely to be the weaker sailors
- Do you have any novice crew taking part?
- Are you aware of any sailors with any particular health problems?
- Are there any minors sailing, what boat will they be on, how competent are they, will they be comfortable in an emergency situation / in the water?
- Which boat is most vulnerable to capsize, swamping or least well prepared or maintained

So now it's time to prepare the Patrol Boats (Follow the laminated Duty Check list kept on the wall in the boathouse)

Unlock the boats and dismantle the doors, take out the boat you have chosen for the duty and back it up to Fort Knox. Replace the club doors as these need to be secure whilst everyone is occupied with the racing.

Check the Boat and trailer

- Air in the tyres?
- Is the hull intact?
- Is there sufficient air in the air chambers?
- Are the engine mount thumb screws tight, is the engine also tied on?
- Is the propeller (relatively) undamaged?
- Is the bung present?

Fuel

The fuel in the tanks of the outboards will always be premixed with two stroke oil (it is a policy of the club, that tanks will always have oil added when refuelling to avoid mistakes). So the duty team should never add oil to any fuel from Fort Knox.

All of the outboard fuel tanks can be used on any boat / outboard. The connections and fuel / oil mixes are all identical.

If there is insufficient fuel in any of the tanks, you can decant fuel from one tank to another. Never take fuel from another fuel can (other than another outboard tank) without consulting a member of the committee.

Keep fuel line ends free from the standing water in the bilges of the boat to avoid water getting into the fuel.

Run the engine up

- If using the red PB; do a visual check of the remote cables (Steering, throttle & gears) as they connect to the engine to ensure they are attached correctly.
- Once the fuel tank is in boat and tied down, connect the fuel hose and open the filler cap breather.
- Place the flush muffs over the water intake which is positioned just in front of the propeller. Turn on the hose.
- Repeatedly squeeze the in-line fuel pump bulb until it goes hard.
- Check the engine is out of gear.
- Check the throttle is set to tick over.
- Check that the engine immobiliser is set to on.
- Give the engine a few quick long pulls to start.

If it fails to start, check all the fuel line connections and that the bulb is still hard.

If the engine still fails to start, it may have been flooded in which case you either leave it for 5 minutes or, if you can't wait, continue to pull the starter chord with the choke OFF and the throttle open.

If you do this: you must be ready to shut the throttle down when the engine starts.

- Once the engine has started from cold, it's important to run it for 3 – 4 minutes to ensure it warms right through and draws fresh petrol into the carburettor, this will make starting when afloat easier.
- Check that the telltale has water coming out of it.
- Take a little time to familiarise yourself with how the tilt and lock mechanism works on your engine, they differ. When at sea, as helm, you should be aware of whether or not the engine is locked down.

Equipment in the boat. Ensure the following are already in the boat:

1. A bow anchor
2. A second anchor (you may want to swap this for the deep water anchor depending on the nature of the race course)
3. A painter (the rope tied to the bow)
4. A RED medical emergency flag to be hoisted if you want the Tower to call for an ambulance.
5. A tow line
6. A small buoy or fender. To be tied to the mast of a capsized dinghy. This can be a temporary aid to stop the boat inverting whilst preparing to right the boat or can be left on the mast of an abandoned boat as a visual guide to those coming across the boat that the crew have been safely removed (if crew-safe tags are not available).
7. A Paddle
8. A Bailer
9. A Heaving Line. This is only used to reach another boat or person prior to attaching a more suitable line.
10. At this point you will also need to load on any racing marks required for the day.

You will also need to collect the following from the Tower:

1. An emergency knife for each crew member to be worn on the body at all times afloat
2. VHF radio for each member of crew. Check that they are charged and on the correct station. As a general rule only one radio turned on at a time to avoid reception feedback. (The proper use of VHF radio at SSC is covered by separate training notes)
3. The black plastic screw top box containing;

- a. Crewsafe tags and cable ties These are fixed to the boat in the event that you take the crew off and abandon the boat, it informs those finding the boat that the crew are safe and that the boat belongs to a member of SSC (or at least SSC have knowledge of the incident).
- b. Space blanket.
- c. Spare kill cord.
- d. Wire cutters (in sealed bag to avoid corrosion)
- e. Multi tool (in sealed bag to avoid corrosion)

Stand By PB

As a minimum and only in settled conditions: the standby PB should have the fuel installed, the engine run and be left at Fort Knox ready for a quick launch. A chair or cone placed a few yards in front of the boat to dissuade cars from blocking it in.

Each duty will present different pressures on the PB team and the greater the pressures, the greater the need to more fully prepare the standby PB. Your initial assessment of the weather, the size of the fleet, the wind force and direction, those sailing and the size of the course will help you assess the likelihood of having to put the standby PB into action. If strong winds or a large fleet dictate, the SBPB should be left on the beach and a 'quick response' crew nominated to take it to sea at short notice if required. Before you concentrate on the PB, make sure the ramp barrier is open and the cones are put out to keep cars from parking close to the ramp.

Then off to the Galley to prepare your hot or cold drink and snacks.

Launching and retrieval of the Patrol Boat.

Did you put the bung in?

Did you know that the drain hole in the back of the boats should have a rubber one way valve in the exit hole, if this is in place, you should be able to leave the bung out, allowing water out when you are steaming, but not in. This only works if the black rubber valve is installed.

Launching should be fairly easy, we rarely launch in conditions so bad that we have to consider swamping, but it can happen. To avoid swamping launch with the stern pointing into the surf and in as shallow water as possible, once off the trailer, bring the bows swiftly round to face the surf. Walk the boat into water deep enough to safely motor away from the shore.

We may need to launch a second PB in an emergency. If this is done with a strong onshore wind and at a higher state of tide, the swell may well be enough to swamp the boat, in this case, you may have to launch the boat bow first, but this will make handling the trailer in deep water difficult so will require additional help. You could also consider easing the boat off the trailer on the waters-edge and launching bow first without the trailer, this would also require at least four people to launch safely.

Stand at the bow or alongside the boat, but NEVER AT THE STERN of the boat whilst the other crew drops the leg in the water and starts the engine again. Go through the same prestart checks as before, but do not use the choke this time, only if it fails to start after a number of pulls should you attempt to use the choke.

As soon as the engine is running and you are sure you are in deep enough water fit your end of the kill chord to your arm or leg (as you prefer) the person in the water should angle the boat straight out to sea and climb aboard. The next few yards are tricky; the propeller is typically likely to ground on the seabed until the boat is three quarters of the way out to the club pole. Every time the prop hits the

ground it will be damaged and could completely fail during your duty. In calm conditions the crew can help keep the prop shallow by keeping their weight forward, the revs should be kept low, just high enough to keep the boat moving over the ground. In choppy seas, it's important to walk the RIB in the deepest water manageable (before starting the engine) as the prop is more likely to ground violently in the troughs of the waves.

Coming ashore

Remember to take note of what depth of water you may have when coming back ashore and drop the revs right back as you approach the shallows. Prepare the crew to ease themselves over the side gently once you have stopped the engine. Crew are safest going over the side of the RIB as the freeboard is lowest at this point, you are also less likely to be run down by a boat that is probably still moving forward.

Stopping for Tea

Bringing the boat ashore during tea break needs a little thought:

It's not good practice to haul the boat up the beach unless there are no alternatives. Preferably, tie the painter of the boat to one of the deepest breakwater posts, this doesn't work if the wind is onshore, so once you have tied the boat, check to see that it will lie happily away from the breakwater and the shore. If you have no alternative to beach the boat, ask for a few hands to help you pull the boat above the surf, but make sure those tugging the boat spread the 'pull' across all points of the boat, we should try to avoid placing too much strain on any one rubber handle of life line.

Back on the trailer

Getting the boat back on the trailer can be tricky, especially with an onshore swell. It's very important that you muster plenty of help from the sailors on the beach, don't be shy about bellowing for help. You will need the same help to take the boat over the wall.

END OF DUTY CHECK LIST

Once back at the clubhouse it's time to get out the END OF DUTY CHECK LIST and follow the 'packing up' bullet points.

The boat should be backed up to the Fort Knox and the engine flushed through with fresh water once again. Keep the engine running for 3 to 4 minutes to ensure the salt water is completely flushed out. Only once the engine has been stopped, can the fuel line be disconnected and the tank put back in the store. Briefly rinse the salt from the rest of the boat. Raise the engine and then raise the front of the trailer to allow the water to drain fully from the boat. Putting the boat back inside fully drained helps keep dampness out of the building. Use the CHECK LIST to ensure that you put everything back where it belongs, rinse off the radio's and put back on charge in the tower.

At the end of the duty, please sign the PB duty register to confirm you have completed your duty and to report any missing or faulty equipment.

When all the boats have finished using the ramp, the barrier will need to be locked, cones put away and possibly the field gate locked

On The Water.

Once afloat, your first duty is to set the marks as directed by the RO team, use the pennant to gauge

the wind direction to ensure the legs of the course are as the RO desires. Make sure the mooring lines to the mark are untangled and the anchors are locked in the open position.

Generally, the marks are towed behind the rib, in this case; clip the mark lines onto the shackle on either side of safety rope on the side of the RIB, the handling of the boat with these in tow will be hampered and in an emergency you might decide to abandon the marks temporarily so they do not hamper your close quarters manoeuvring. As you set each mark, check with the RO that he is happy with the position set before moving onto the next leg of the course.

When the marks of the course are set, you can turn your attention to the start sequence for the first race, once the start sequence is underway, it's best to avoid contacting the Tower as they will need their full concentration until all the boats are over the start line. Position your boat outside the outer distance mark of the start line, so that you can monitor the start line as the boats approach to check that no one jumps the start. It's often good to follow the fleet to the first mark to check how cleanly the boats round all bunched together.

When the racing settles down, I always work out which direction the PB will drift and motor to the opposite side of the course, keeping inside the racing line, I cut the engine and let the boat drift through the centre of the course. Some people are happier to leave the engine running throughout the duty, if you do this, do not leave it on tick-over for long periods to avoid it oiling up.

During the entire duty afloat, you must ensure you are not distracted from keeping a lookout 360 degrees to check that all boats are safe, count the boats regularly to ensure you can account for them all. Don't rely on a call from the Tower to respond, the lack of a report may be down to radio failure. Keep a lookout for squalls or changes in weather conditions (usually coming from the direction of the Sportsman). You will have a better view in this direction than the Tower.

When do your responsibilities on the water end?

It's tempting to come ashore early to get to the front of the tea line, but you must be mindful of who you have left out there. It is more likely that those you have left out there struggling to finish the course are the ones most likely to need your assistance. If you do decide to come ashore, be ready to relaunch at a moment's notice to render assistance.

Free sailing: There are times that a couple of boats will start to sail away from the race course after the second race, they are most likely off for a freesail. If this is the case, they accept that they DO NOT have the benefit of PB cover for the freesail, they will understand that the PB has marks to collect and needs water to get back onto the trailer whilst they are still sailing.

There are occasions when the PB attends non SSC related incidents that occur in our waters. It is right that we attend these immediately if we suspect that life is at risk, but we have to be mindful of leaving the SSC fleet without PB cover, there's not much wrong with popping off 50 yards to pick up a ball that's quickly being blown out to sea, especially if it avoids a youngster getting into trouble trying to swim to it, you can turn it into a MOB exercise, but a quick discussion with the tower on how the risks are mitigated before you shoot off will help keep the situation safe and maintain the lookout all the time.

Ultimately, the Race Officer of the Day has the authority to direct the actions of the PB helm and Crew, so be ready to defer to their instructions as they may well have a better over-view of the situation from the comfort of the Tower.