

Queen Mary Sailing Club - Race Officer Check List

Read in conjunction with current NOR and SIs, Course diagrams and Start Timing Charts, all to be found on the Club website Racing and Race Officers pages

Annually: Read the Club Racing Risk Assessment and sign in the office that you have done so.

Before any event:

Check the dates of your duties on the QM dutyman web site, or on the Race Officer section of the Club website, and confirm.

Check that a complete team of two or three people is available for the event.

Pick up or view online the current NOR and SIs and review them for any series changes.

Look at windguru forecast during the week for initial assessment of the weather conditions.

Pack your bag with buoyancy aid, warm clothes, water proofs, stop watch x 2, whistle, mobile, sunglasses, rule book, notebook & pens. In summer include a sun hat, sun screen and water.

On the day, prior to leaving the pontoon:

Arrive at the latest one hour prior to the first start and announce your arrival to the office.

Check that the signing on sheets have been laid out on the table outside the office.

Pick up the Club Racing flag box and check that all flags are available and in their correct slots.

Ensure that there is a whistle, compass, recorder, radio, duckhorn hooter (in working order) and three results folders with pens and pencils, plus copy of NORs and SIs and Start Timing charts for the current series.

Reconfirm if there are any special changes in SIs, NOR or Sailing Area for that particular day.

Check if there are any other events being run and agree the Areas of Racing with the other ROs.

Ask the Duty Officer who is supporting club racing and introduce yourself to the safety team, discuss the course and agree call signs, usually **Club Race** and **Safety One** and **Safety Two**. Discuss the position and size of the course taking into consideration any changes forecast. Agree a position of the leeward mark that allows the course to be swung if the wind direction changes. Try to avoid putting any marks and the start line close to the reservoir sides or the dredgers; use the available water to the best advantage. Discuss when the course will be laid and advise Safety One and Safety Two that you intend to start on schedule.

Ensure that the W, X and 1st Sub flags are on board the committee boat attached to their poles.

Ensure that the course / rounding boards / start numbers are onboard the committee boat.

Check the committee boat horn and check that you have a working duckhorn back-up.

Get kitted up and ensure you have food and drink available.

Sunday Club Racing

Leave the pontoon and drop anchor behind and to starboard side of the leeward mark.

Be close enough to read boat numbers easily but not so close that you will affect the racing.

Leave enough anchor line to manoeuvre forward or astern between starts and races.

Raise the on-station Orange flag to the masthead; bend on all of the class flags in order:

Start 1 - Laser

Start 2 - Blue defaced Number 2 with Green defaced Number 3

Select the warning flag, usually flag P but consider either Z or U (I is never used for Club racing and Black is discouraged, more work for ROs and may force boats to sit out a recalled race).

The courses are J (sausage/triangle) for Lasers & Fast and Slow handicaps, and course L (windward/leeward) for RS400 and Fast windward/leeward fleets.

The size of the course should allow for one lap rounding time of approx 10 to 15 minutes.

The length of each race should be about 45-55 minutes, so 3 or 4 rounds is ideal, preferably 4.

On windy days offer a long beat with broad reaches on a light day a shorter beat with tighter reaches.

Fix 3 course boards to the rear of the committee boat left to right: e.g. J/4, L/4, J/4. It is usually best to set the same number of rounds for all fleets for the first race as this generally achieves the shortest waiting times between races. J/4, L/5, J/4 will reduce bunching on the finish line.

Ensure the beat is good and fair; the wind swings so take a mid point and set the windward mark.

Set a long enough start line (1.25 to 1.50 times the total length of boats expected in the biggest fleet), ensure the line has a 5-10 degree bias to port (1-2 rib lengths). This will spread the fleet down the line.

If the line is biased to starboard there is a major risk of a general recall with all the inherent problems and delays.

Set the finish line on the starboard side of the committee boat at right angles to the direction from the last mark.

The length of the finish line need only be long enough to take four or five boats so not too long.

With the flags ready, courses set, start and finish lines in position you are now ready to start.

Check by transits that the marks are not moving and the committee boat is secure on its anchor.

Ready to go nearly:

Check that all those on board know their specific jobs, timing, flags, sound signals and recording.

Check that there are at least two stopwatches onboard that are working correctly (preferably three).

Use the Start Timing charts to match the SIs or write down a crib sheet of the timing sequence for the flags.

Set watches ready for the start sequence (including removing AP or 1st Sub if needed).

Ensure that the recording sheets are ready for use and be prepared to start Laser lap round recordings prior to the completion of the start sequence.

Everybody happy? Start the sequence:

Record the time of the start of the race.

Race officer calls the timing sequence with the appropriate flags and sound signals calling the last 15 seconds down before each flag change. Use the voice recorder.

Flags should be displayed or removed with the timed sound signal.

At one minute before each start check for boats likely to be On Course Side (OCS).

At the Go be ready with either the X flag (individual recall) or 1st Substitute flag (general recall).

If all boats are clear behind the start line at the Go shout "All Clear" - this is helpful to the competitors.

If the X flag (individual recall) is used (with one additional sound signal) take note of the offending boat(s). Continue to fly the X flag until the offending boats have returned to the start or for a period of 4 minutes (2 minutes in winter). If boats do not return to the start make a note that they were OCS on the result sheet.

If the 1st Substitute flag (general recall) is used (with two additional sound signals) shout out "General Recall" - not essential but helpful for the competitors. Ask Safety One to recall the competitors. The general recall flag should fly for a period of up to 2 minutes (as per SIs). The fleet recalled should then be restarted after the last start in the sequence. If applicable, consider reducing the number of rounds for the recalled fleet in order to avoid delays between races. The course board must be changed prior to re-raising the class flag.

Remember that you can raise the AP with two sound signals and postpone at any time, (buy yourself some breathing space). Drop with one sound signal one minute before the warning signal.

All fleets have now started, watch out for late starters and ensure they are not outside the time limit - see the appropriate SI.

Recording:

Watch the fleets as they progress around the course. It is essential to read the race, making notes of the leader in each fleet and also those at the back. All boat numbers must be recorded as they pass between you and the leeward mark on every round with the caller stating boat class, sail number and fleet. It is fine to record the last four numbers e.g. 184567 can be recorded as Laser 4567. As the race progresses the boats' positions may change and therefore the race story will be clear for future reference if necessary.

Ensure that all classes have their proper place on the recording page and split the fleets between the recorders if there are a lot of competitors e.g. one to focus on Lasers only. If you have one running total of boats and boat numbers this may cause you difficulty in identifying when boats are due to finish but the office will be able to sort the results correctly if you record all roundings and finishers.

Use the voice recorder for all finishes. You may think that it is not needed but use it anyway because it can really help in some circumstances.

No times are needed for finishing the Laser and Radial fleets (Start 1), just boat numbers in finishing order.

Times are needed for all other boats (Start 2). Here you need boat class, boat number and finish time in the finishing order. If boats finish in a tight bunch record the boat classes and numbers with the time for the first and last and you can backfill the intermediate times later.

Note on the race sheets the basis for finish times; is it real time (office needs to subtract recorded start time) or elapsed time and if so from which start – Start 2 is the recommended 0 time.

Make a note of all boats that have been penalised in any way e.g. OCS, ZFP, UFD, RET, DNS, DNF.

Finishing the race:

Note that the slow handicap fleet does one round less than the fast handicap fleet. Raise the Blue Finish flag (no sound signal) when any of the fleets are on their final leg. This should be done at an appropriate time so as not to confuse competitors. When the blue flag has been raised it is up to the competitors to finish when it is right for them to do so. They must complete the correct number of rounds identified on the course board. Record those finishing before they should as DNF (and don't give them a whistle, they may continue and finish correctly, if so delete DNF).

As boats are finishing make a note of the actual time of the first and last finishing boat for each fleet.

Shortening the Race:

If it is necessary to shorten the race for a particular reason raise the S flag (and / or place the S board at the front of the committee boat) with two sound signals when the leading boat is close enough to hear. The blue flag should also be raised. If you want to shorten any particular fleet their class or warning flag should also be raised with the S flag. There is an inherent danger in using the S flag as it causes confusion within the different fleets as well as for recording. It is therefore better that the course and the length of the races are correctly estimated prior to the start so that shortening is a last resort. If the S flag is used please note the SI concerning the finish line.

Using Flag W to finish tail enders.

Sometimes there can be undue delay between races caused by a few boats being a long way behind due to failing wind or multiple capsizes. It may be expedient to finish boats at their observed positions and inform them by sending Safety One with the W flag and record their position, and for handicap fleets the number of rounds completed and actual or estimated time.

Between Races:

Try not to keep competitors waiting too long between races.

Any time after the last competitors have passed the windward and wing marks, review the course for its accuracy and move marks quickly if necessary.

If necessary alter the number of rounds displayed on the course boards e.g. to lengthen the race if the wind has strengthened. If there is any doubt that all competitors have seen the change, raise the L flag, (come within hail or I have a message for you). Point out the changes to the competitors.

Check the start line once again.

Next Race:

Start and complete the second race as the first.

When the race is completed take down all flags and replace in the box in their correct slots.

Return & Results:

Go ashore taking the race box, results, your personal belongings and litter.

Review all of the records for accuracy. Every boat recorded needs a result or to be scored one of OCS, ZFP, UFD, RET, DNS or DNF.

Ensure that a set of results is presented to the office without delay, pointing out any potential issues. If you want to make further checks, e.g. from a voice recorder, take a copy and work on this. Please do not leave the club until the results have been entered, checked and any queries resolved.

Race Review:

Please let the Sailing Secretary know of any issues with equipment or processes, and at any time discuss with a member of the sailing committee to see where improvements can be made when running races for QMSC. And thanks for helping!

Average Lap Handicap Racing eg Wednesday Evening, Club Championship

Leave the pontoon and drop anchor $1/3^{\text{rd}}$ of the way up the beat and approx 10 metres to starboard of the rhumb line between the windward and leeward marks.

Leave enough anchor line to manoeuvre forward or astern prior to the starting sequence.

Raise the on-station Orange flag to the masthead and bind on the Class flag H.

Select the Warning flag, usually flag P but consider either Z or U flags (I is never used for Club racing and Black is discouraged, more work for ROs and may force boats to sit out a recalled race). There could be as many as 50 + competing boats so it is essential that the RO can see the line clearly. If Z or U flags are used it is more likely that competitors will keep clear of the line and general recalls are less likely.

The courses are used in rotation to balance out handicap advantages:

“K” Triangle, “L” Windward/Leeward, “N” Trapezoid.

The size of the course should allow for one lap rounding time of approx 10 to 12 minutes.

The length of the race should be 45 minutes with the slowest boat not racing for more than 1 hour.

Fix the course board, (letter only e.g. “K”), to the stern of the committee boat.

Ensure the beat is good and fair; the wind swings so take a mid point and set the windward mark.

Set a long enough start line, (1.25 to 1.50 x the total number of boats expected). Ensure the line has a 5 - 10 degree bias to port. This will spread the fleet down the line.

If the line is biased to starboard there is a major risk of a general recall with all of the inherent problems and delays. In the spring and early autumn, daylight is at a premium so a clean start first time is beneficial for both the competitors and the RO.

With the flags ready, course set, start line in position you are now ready to start the race.

Check by transits that the marks are not moving and the committee boat is secure on its anchor.

Get the safety boat to sit at the pin to identify starters who are OCS and radio you their numbers.

Ready to go nearly:

Check that all those on board know their specific jobs, timing, flags, sound signals and recording.

Check that there are at least two stopwatches onboard that are working correctly (preferably three).

The sequence: -5 mins “H” Up, -4 mins “P” Up, -1 min “P” Down, 0 min “H” Down.

Everybody happy? Start the sequence:

Use the voice recorder. Race officer calls the timing sequence with the appropriate flags and sound signals calling the last 15 seconds down before each flag change.

Flags should be displayed or removed with the timed sound signal.

At one minute before the start check for boats likely to be OCS (On Course Side).

At the Go be ready with either the X flag (individual recall) or 1st Substitute flag (general recall).

If all boats are clear behind the start line at the Go shout "All Clear" -this is helpful to the competitors.

If the X flag (individual recall) is used with one additional sound signal take note of the offending boat. Continue to fly the X flag until the offending boats have returned to the pre-start side of the course or for a period as prescribed in the rules of racing, (no longer than 4 minutes). If boats do not return to the pre-start side of the course make a note that they were OCS on the result sheet.

If the 1st Substitute flag (general recall) is used with two additional sound signals shout out "General Recall" - not essential but helpful for the competitors. Ask Safety One to recall the competitors. The 1st substitute flag is then dropped with one sound signal one minute prior to a subsequent starting sequence: -6 mins 1st Sub Down, -5 mins "H" Up, -4 mins "Z or U" Up, -1 min "Z or U" Down, 0 min "H" Down.

Remember that you can raise the AP with two sound signals and postpone at any time, (buy yourself some breathing space). Drop AP with one sound signal one minute before the warning signal "H".

The fleet has now started, record the start time, watch out for late starters and ensure they are not outside the time limit, see the appropriate SI.

The start line is a gate that boats must pass through on each lap. It is also the finish line and to make reading boat numbers easier the pin end of the line should be brought in after the start. The finish line should be 35-45 metres in length.

Recording:

Watch the fleet as it progresses around the course. It is essential to read the race, making notes of the leading and subsequent boats as they pass through the start/finish line on each round. Boat numbers should be recorded with the number of laps that each has completed within the race period. Those boats that do not sail through the start/finish line **cannot** be counted for that round.

There will be boats of significant speed differences, (e.g. Toppers to Moths), and so within the race period of 45 mins to 1 hour some boats may complete as many as 5 rounds whereas slower boats may complete fewer than three. It is **lap counting which is imperative** in average lap handicap racing so understanding the positions of the boats at the head of the fleet and those toward the rear is essential.

If you have one running list of boat numbers on the recording sheet, after coming ashore count the number of rounds each boat has completed and enter it alongside the finishing time for that boat.

Finishing the race:

After a period of about 45 minutes (up to 55 minutes in high summer if conditions good) raise the Blue finishing flag (no sound signal). The first finisher need not be the fastest boat in the race. Ideally boats of the same class should do the same number of laps, if possible try not to split fleets.

You should aim to get everybody across the finish line within the shortest possible time say ten minutes, preferably shorter. The faster boats may well have passed through the finish line on a

subsequent round prior to the blue flag being raised. This is OK but please be mindful of the wind conditions as a falling or rising wind may affect the race and skew the results.

Make a note of every boat class and number as it finishes with its elapsed time. As the boats may come to the line in quick succession get the boat numbers down first and the times following. **Call** e.g. it is 45 minutes and 10 seconds, 25 seconds, 30 seconds etc, then it is now 46 minutes and 10 seconds and so on. It is essential to use a voice recorder and keep it running during the whole of the finishing sequence. If a boat is lost it can be picked up from the recorder. After recording all boats check the number of rounds completed and add this information against each finish.

Make a note of all boats that have been penalised in anyway e.g. OCS, ZFP, UFD, RET, DNS, DNF.

Shortening the Race: There is no need to shorten the race as it has a known time period

Return & Results:

Go ashore taking the race box, results, your personal belongings and litter.

Review all of the records for accuracy. Every boat recorded needs a result or to be scored one of OCS, ZFP, UFD, RET, DNS or DNF.

Ensure that a set of results is presented to the office without delay, pointing out any potential issues. If you want to make further checks, e.g. from a voice recorder, take a copy and work on this. Please do not leave the club until the results have been entered, checked and any queries resolved.

Race Review:

Please let the Sailing Secretary know of any issues with equipment or processes, and at any time discuss with a member of the sailing committee to see where improvements can be made when running races for QMSC. And thanks for helping!

Pursuit Racing

The objective of a pursuit race is that, if boats of different classes are sailed by crews of equal ability, they should all cross the finishing line together, having started at different times related to the handicap of their boats.

Race Duration:

The race duration will be as prescribed in the NOR and the Office will ensure that all of the boats start times are calculated correctly. Start times and numbers must be posted onto the notice board and printed for all entrants.

The Course:

The course should be long enough to be fair for all and should encompass all points of sailing. The course should include at least three beats, and where possible incorporate reaches, (for both symmetrical and asymmetrical spinnakers), and runs. Take advantage of the size of the lake and if necessary ask for advice.

Having decided on the course, advise the course setters and draw a plan of the course onto the official notice board. It is essential to show all of the rounding marks and these must be numbered and identified with coloured flags. The course should be written below the course plan stating which is the first and then subsequent rounding marks and to which side the mark should be passed;

e.g. 1 port, 2 port, 3 starboard etc.

The start line is not part of the course for subsequent laps i.e. after boats have started.

Ask a third party to check the course plan. Check that the course setters have interpreted your requirements correctly and if needs be go with the course setters to confirm its suitability.

Briefing:

It is essential to hold a briefing at the time in the Notice of Race which will usually be 45 minutes prior to the first warning signal. The briefing time should be posted on the official notice board along with the start time and the race duration.

At the briefing explain the course and its duration. Include any exclusion areas or marks where there could be cause for concern, (e.g. dredger marks, barge movements, low water marks etc).

Explain the start and finishing procedures.

Starting:

Starting sequence numbers must be fixed onto the committee boat and these must be checked and in correct numerical order.

Position the committee boat at an appropriate position on the first beat and check that the line is square and long enough for the biggest fleet of boats, (1.25 x the total length of boats expected).

The warning signal H is raised 5 minutes prior to the start, the prep flag is hoisted 4 minutes prior to the start and lowered one minute prior to the start, the warning signal is lowered one minute later at the start and the numbering sequence starts at 00.

Ensure that your stopwatch is running from the start time for the correct race duration.

Every minute the number sequence boards move e.g. 00 = start, 01 = one minute, 02 = 2 minutes. On every minute there should be a sound signal as the boards are changed. **Boats should start when their number appears.** Check the board numbers against your stop watch for synchronisation. Ensure that the correct class has started against the number shown and confirm against the starting list. One person should be responsible for changing the timing boards and one person should be responsible for timing and observing the race start.

Ensure that the correct classes start at their designated times and keep the sequence running until the last class has started. **Do Not Stop** your watch as it must continue to run for the duration of the race. Calculate the exact finishing time.

Individual recalls: If any boats are OCS as their start number appears (or have started on a start number before their correct one) the X flag should be flown with one sound signal and boats that do not return should be noted OCS. The X flag can only be flown for 30 seconds, as the next class may be starting at the next minute sequence.

General Recalls: The 1st Substitute flag should be flown with two sound signals and all boats on that start must return to the starting area. The 1st Substitute flag can only be flown for 30 seconds, as the next class will be starting at the next minute sequence.

On a general recall, the recalled boats re-start two minutes later in the sequence.

During the Race:

With all boats started successfully it is essential to maintain track of the leading boat at **ALL TIMES**. Initially the lead will change occasionally but as the race progresses the lead will change hands more frequently as the faster boats pass the slower boats. The Race Officer must be able to observe the race and note the change of leader. It would be helpful to arrange for a lead/pilot powerboat. This powerboat pilots the fleet around the course picking up the new leading boat as the race progresses.

The fleet will continue to sail the course until the race duration is complete.

Finishing:

There is no pre-determined finishing point on the course. The finishing line will be at the point on the course where the leading boat has completed the race duration. The finishing line will be between two marks with blue flags. This is usually managed by two ribs motoring in front of the leading boat as a moving finishing line. The finishing line should be as square as possible to the rhumb line between the last mark and the next mark with a length of about 20 metres. As the race duration time is completed there will be a sound signal and the ribs will drop anchor. Boats would then pass through the finish line and numbers should be recorded. There will be a time limit for finishing, (See the SIs). However at a club event it would be appropriate for the finish line to gently motor in a reverse direction of the course to finish boats.

It is strongly recommended that the finishing procedure is explained at the briefing. If the finish is on a beat or a run it is important that the finishing committee boats maintain a course directly on the rhumb line to the next mark. The leading boat must come to the finish line.

At larger events there could be subsequent fixed finishing marks, usually positioned at the end of a beat. This method is used at the Bloody Mary.

Return & Results:

Ensure that all finishers are recorded in the correct order.

Return to base and review all of the records for accuracy. Every boat recorded needs a result or to be scored one of OCS, RET, DNS or DNF

Ensure that a set of results is presented to the office without delay, pointing out any potential issues. If you want to make further checks, e.g. from a voice recorder, take a copy and work on this. Please do not leave the club until the results have been entered, checked and any queries resolved.

Race Review:

Please let the Sailing Secretary know of any issues with equipment or processes, and at any time discuss with a member of the sailing committee to see where improvements can be made when running races for QMSC. And thanks for helping!