BRITISH ROWING

A Multi-Lane Umpiring Guide

March 2021

TEAMWORK | OPEN TO ALL | COMMITMENT

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Objective

This Multi-Lane Umpiring guide is intended for all Umpires with the aim of providing an introduction to the wider dimensions of umpiring at a multi-lane competition. We benefit from many multi-lane courses, each with slightly different layouts, but the fundamentals are the same. The overall aim is that umpiring is undertaken in a safe manner and delivered to a consistently high standard for the benefit of the athletes in the sport.

To do this requires knowledge of the Rules, awareness of how they are applied, teamwork and the desire for continuous improvement and learning from the past and experiences of others.

It should be noted that while the material in the Guide[1] reflects current thinking, it is not intended to be a definitive document. In the future there are likely to be changes to existing facilities, the introduction of new facilities and new course operating systems that may lead to the need to make changes in the recommendations given in the Guide. The members of the Multi-Lane Umpiring Panel (MLUP) will maintain a 'watching brief' on developments so that revisions can be made when necessary.

The MLUP welcome any comments or feedback from umpires using the Guide to improve or develop the knowledge of all.

Terminology

Terminology used in this guide is in accordance with the British Rowing Articles of Association and Rules of Racing.

At present, the word 'ensure' is frequently used in some British Rowing documents including the Rules of Racing. This word has been retained in quotations from relevant documents but, as it is often not physically possible for a person to 'ensure' that an action be taken, its use should be taken to imply that every effort should be made to make sure that an action is taken.

References within the text, for example 6-1-1, refers to Rule 6-1-1 of the 2021 edition of the British Rowing Rules of Racing. Caution should be exercised when a later edition of the Rules has been published, as the current version of the Rules of Racing supersede any guidance contained within this guide.

The Rules of Racing

The fundamental purpose of the British Rowing Rules of Racing: 'to provide a basis for safe, fair and equal racing' (Rule 1-2), underpin competitions in the multi-lane environment. It is critical that the definitions and levels of authority which the umpire holds are known so that decisions can be made when needed.

The number of situations in multi-lane racing that can arise which require action by an umpire applying the Rules of Racing is unlimited. In many cases there may be several

[1] This Guide was developed from material first produced by the East Midlands Region for umpiring on the multi-lane course at the National Water Sports Centre at Holme Pierrepont. This early material was put together by Harry Harvey and his colleagues on the East Midlands Umpire Commission. Subsequently the material was expanded and updated by Paddy Ibbotson and then by the Multi-Lane Umpires Commission. In the production of this version of the Guide, the earlier drafts have been further revised by the MLUP.

alternative possible solutions to the situation encountered and a strong element of judgement may be required in the interpretation and application of the Rules of Racing.

In the interests of all competitors, and for the quality of the sport, it is necessary to apply the Rules of Racing and the relevant sections of RowSafe in a clear and consistent manner. Each Race Official must also know their area of responsibility.

This Guide is not intended to be a replacement for the Rules of Racing; it is a guide to their application in multi-lane racing and a training tool for aspiring multi-lane umpires.

Structure

This Multi-Lane Umpiring Guide is issued by the MLUP and is arranged in two parts:

Part 1 contains generic guidance for multi-lane competitions, which amplifies and interprets the British Rowing Rules of Racing. It is suitable for all British Rowing Umpires officiating at any British Rowing multi-lane competition. It is produced and reviewed by the MLUP.

Part 2 covers specific multi-lane courses and/or competitions. Part 2 provides detail at local level. It is produced and reviewed by the MLUP, working in partnership with competition organisers and Race Committee Chairs (RCCs).

Part 1

1. Introduction

1.1. Safety

The most important priority for all involved in the sport is **safety** at all times. This is covered by Rule of Racing 6-1-1a: 'It is the primary duty of every Race Official to care for the safety of competitors, officials, other water users and the public at large.'

On a multi-lane course, it is critical for all officials to maintain spatial awareness. There is a requirement to be aware of the conditions on the water and any likely effects on:

- racing competitors;
- other crews on the water;
- all officials, volunteers, safety personnel; and
- members of the public.

The umpire's focus should not be confined to the crews in a race; they should monitor all events and likely events in the section of water around them.

Section 5-2-2 of the Rules of Racing states: 'There is a general commitment that all officials should ensure that racing takes place in safe conditions (Rules 6-1-1 and 7-5-1 etc.).' Rule 7-1-1 defines the roles of the Safety Adviser, Race Committee Chair and Race Umpire in suspending racing.

Racing must be suspended or stopped if the Safety Adviser, Race Committee Chair and/or a Race Umpire decides that conditions are unsafe or unfair.

This applies to all Race Officials at all times. Any concerns about any aspect of safety at a regatta **must** be addressed and/or be brought to the attention of the Safety Adviser and the Race Committee Chair and, if necessary, the Organising Committee.

At many multi-lane competitions, there will be a Race Control function (this may be called Control or Tower). Given the larger geographical spread of a multi-lane competition and the number of communications channels used, this is often a key role in enabling the competition to run smoothly and to facilitate communications.

1.2. The Outcome

The second most important duty of a Race Official after caring for safety is '... to ensure that all crews have a fair and equal opportunity of winning' (Rule 6-1-1b).

In multi-lane racing, umpires must act to restore fair racing conditions and do all that is possible to try to ensure that all crews have fair and equal opportunities to win. For this purpose, the umpire must be aware of the outcome of the race and the implications of finishing positions.

2. Course Features

2.1. Multi-Lane Courses

The table below provides a summary of the multi-lane courses. Each course has its own unique features, geographical orientation and layout, and it is useful to become familiar with these. It is common for a particular venue to host several different competitions during a season and may set out certain functions in slightly different ways; always review any instructions for a particular competition, even if you are familiar with the course.

Venue	Location
Dorney Lake (Eton College Rowing Centre)	Dorney, near Windsor
The National Water Sports Centre (NWSC)	Holme Pierrepont, Nottingham
Peterborough	Peterborough
Strathclyde Park	Motherwell, near Glasgow
Tees	Stockton-on-Tees

More specific details of these courses are provided in Part 2.

2.2. Physical Layout

All multi-lane courses share certain common features such as:

- Boating area;
- Access from boating area to the start;
- Start area;
- Buoyed racing lanes;
- Access back to boating area;
- Timing system;
- Communication channels down the course.
- Finish area

Some courses have additional features such as:

- Safety lane;
- Warm-up and cool-down areas;
- Intermediate pontoon start;
- Video/photo equipment for judging at start and finish.

There is considerable variation in the standard of facilities provided by multi-lane courses and umpires should familiarise themselves with the relevant features of the course on which they are umpiring and how weather conditions may affect the course during racing.

2.3. Boat Movement Circulation Patterns

Boat movement circulation patterns and regulations are a critical part of ensuring safety for

all at a multi-lane competition. There are likely to be different patterns for training (certain lanes may need to be vacant for safety purposes), racing side-by-side and when time trials are taking place. They will be specific to a venue and regatta but all will have been carefully considered as part of the competition's preparation and safety planning.

The circulation patterns must be clearly communicated and displayed to competitors and understood by Umpires (defined by Rule 6-1-4) and Additional Officials (defined by Rule 6-1-5). All crews must follow the appropriate circulation pattern for the competition and umpires should constantly monitor boat movements, as well as being aware of which lanes are used for umpiring launches and safety boats. Some boat movement diagrams are included in Part 2.

It can be very dangerous for crews to proceed towards the start in the lanes used for racing and for crews to proceed towards the finish in the lanes that are assigned for crews going to the start. Umpires should be vigilant for crews that do not follow the published circulation pattern and take appropriate action to ensure the safety of all. A serious view must always be taken of non-compliance with boat movement regulations.

It is important to note that boat movement regulations apply to the whole course; this is especially relevant when an intermediate start is in use. Regattas should make this clear to all crews. Umpires should be alert to dangerous traffic flow in the area behind an intermediate start and in warm-up and cool down areas and should be especially vigilant to see that the boat movement regulations are followed.

Each competition will have a set of guidelines for the movement of umpires' launches or positioning of umpires on the course. Umpires should familiarise themselves with the guidelines regarding launch movements (especially when moving towards the start area). Umpires are responsible for the conduct of their launch and should instruct drivers if the launch is positioned or moving inappropriately, during racing or otherwise.

Similarly, umpires on towers or on the bank should monitor the section of water within their zone, watching for crews racing as well as for crews circulating during the competition.

Example actions may include:

- Monitoring crews turning into the start area to take their lanes. Are other crews in their lanes warming up? Is there a danger of collision?
- Crews proceeding to the start or waiting adjacent to the start may stray onto the course. This is more likely to happen if the regatta is behind schedule or when there is a crosswind. The Race Umpire must monitor this during the race. Other officials/marshals should intervene if within earshot.
- Checking that crews cooling down are following the correct circulation pattern. Are they using the correct lane(s)? Are they turning at the correct points? At some competitions or in particular circumstances, cooling down may not be permitted, e.g. if time trials are being conducted.
- Checking that crews warming-up or cooling down are not interfering with races in progress. It is recommended that a non-racing crew should stop paddling as a race goes past them. Crews warming-up or cooling down should not block or cross the finish line as a race finishes: there is the potential to confuse the Judge(s) and/or the photo finish equipment; racing crews could also be distracted. Umpires can advise the non-racing crew accordingly if they see this happening.

- Checking in advance any changes to the normal circulation pattern, e.g. for time trials or for course evacuations.

3. Function of Race Officials

Each Race Official should clearly understand the responsibilities and function of each role they may be given. Equally important is the degree of consistency shown in the operation and application of Rules and regulations by the team of Race Officials. The purpose of this section of the Guide is to show how these objectives can be achieved.

3.1. Control Commission

Responsibilities

- Apply the Rules pertaining to crews, classification of competitors, crew composition and equipment at the point of boating.
- Apply the recommendations and instructions given in the Rules of Racing and in RowSafe with regards to equipment and crew safety.
- Ensure that weighing of competitors (where appropriate) has been done.
- Supervise crew boating areas and be aware of which crews have boated for each event.
- Check that all boats/competitors have got numbers.

Equipment and Checks

- Programme, continuously or regularly updated with the crews in each race, clipboard with rain protection and suitable pens/pencils.
- Means of communication with the Starter/Assistant Starter and Race Control.
- Weatherproof clothing.
- Weighing equipment which has been checked for accuracy.
- Weight certificates for coxes and lightweight competitors.
- Calculator for lightweight crew averages.
- Crew entry forms and membership cards.
- Facilities to allow dead-weights to be prepared. Note that it is a cox's responsibility to have/provide dead-weight but this is a service that is provided at some regattas.

Method

- When checking crews before they go on the water, this should be done on the landing stage irrespective of weather conditions. Take up a position to allow efficient movement for crews boating and disembarking. Boats should be inspected, where practicable, before they are placed on the water. This reduces the requirement for the umpire to bend down and inspect each section and allows the crew to concentrate on boating without distraction.
- Crews should be checked for weight certificates (where appropriate). Competitors should be checked to ensure they are wearing the correct racing strip.
- Boats should be checked for equipment and safety (bow ball, heel restraints, boat identity and if the cox has easy access into and out of the compartment in a front-loader). If a compartment is fitted with a method of closing that compartment, then

the fitment should be in place and intact. Bow balls should be tested to check that they are secured so as to prevent deflection on impact.

- Problems should be sorted out by Control Commission to avoid causing delays at the Start. Any concessions made by Control Commission, such as allowing a crew to boat in the wrong kit, must be communicated to the Starter, Judge at the Start and any other relevant officials to prevent confusion and delays at the Start.
- Lightweight competitors shall be weighed-in each day not less than one hour and not more than two hours before the scheduled time of the first race that day of the event in which the competitor is entered. All members of a lightweight crew must report for weighing at the same time and it is recommended that they are weighed in order: Bow, 2, 3, etc. Lightweight competitors must be weighed in their racing strip. (Rules 7-2-6b, d & f)
- Coxes should be weighed in clothing that is appropriate for the weather conditions; this includes a life jacket or buoyancy aid. Note that a cox-box or similar apparatus cannot be counted as part of the coxes' weight or part of dead-weight. Such apparatus is deemed to be part of the boat. (Rule 7-2-7g)
- Make regular checks of crews coming off the water for the coxes' dead-weights, life jackets or buoyancy aids.
- Keep track of who has boated at all times. The Starter relies on Control Commission for information and advice about late and missing crews. Many competitions now have a specific Control Commission Recorder official to keep track of all crews as they make their way up to the Start. This person is usually positioned on the bank away from the Control Commission area and is the first point of contact for the Starter if any crews are missing at the Start.
- The regatta may wish Control Commission to check crews and membership cards as the crews boat. If this is the case, the competition should specify what checks are required and provide the necessary information to allow these checks to be carried out. All competitors must be able to prove their identity. You may be required to verify the identities of competitors against entry forms and check crew status.
- If anti-doping testing is being carried out, Control Commission may be required to identify a competitor selected by the testing team, to notify them that they have been selected for testing, and to escort them until under the care of the testing team.

3.2. Judge at the Start

Responsibilities

- Alignment of the bows of the boats on the aligning markers provided. Note: a technician may be used to actually align the crews (an Aligner) but the Judge at the Start is responsible for crews being correctly aligned.
- Declare False Starts and confirm/identify the crew(s) at fault.
- On some courses, initiate the timing system.
- In some cases, pass on information to and from the Race Umpire.

- Check that alignment is achieved in an efficient way so that racing can be kept to time.

Equipment and Checks

- Red and white flags (the red flag may have a white cross to improve visibility), megaphone and bell.
- Sighting marks for the Start line.
- Programme, continuously or regularly updated and suitable pens/pencils.
- Means of communication with the Starter, operators on start pontoons or stakeboats, Race Control and Control Commission.
- Binoculars (recommended but not essential).
- Start pontoons or stakeboats and operators.
- Timing system, electronic or manual (only present on some courses).
- Video system (only present on some courses).

False Starts

A start is false if the bow of a boat passes through the line of the Start (the aligning plane) before the Start signal is given. The Judge at the Start is in the best position to be able to judge correctly whether a start is false or not. However, when a crew has clearly moved away from the pontoon before the Start is complete, the Starter is also well placed to judge what has happened. Only the movement of the bow of the boat through the line of the Start constitutes a False Start. Other movements of boat, bodies and blades are not false starts.

Only the crew or crews that caused a False Start (i.e. not all those which subsequently may have started) should be penalised by issuing an Official Warning.

It is possible that no crews will be penalised if, in the opinion of the Start officials, there was a faulty start, e.g. failure of start equipment, outside influence, etc. In this case, the Starter will call the crews back to the Start and will explain that there has been a faulty start. The Starter will then restart the race without issuing any Official Warnings.

Method

The method of alignment is described below. This assumes a system similar to that used at many courses. Certain differences at some courses are described in Part 2.

- Pre-adjust the pontoons for the next race as soon as the preceding race is satisfactorily in progress.
- As soon as one crew is attached, begin making general adjustments.
- At courses with 'fixed' start installations, adjustments can be made on the individual pontoons. The operators on the pontoons/stakeboats can then do the fine-tuning by moving the boat forward or backwards by hand. As a guide, while seeking 100% accuracy, in generally still conditions an accuracy of about $\pm$ 2 to 3 cm may be acceptable.
- At intermediate starts where stakeboats are attached to the same cross course cable, fairly major adjustments may be required in the hands of the operators. As a

guide, while seeking 100% accuracy in generally still conditions, a realistic tolerance would be of about ± 5 cm.

- Use the minimum number of words to instruct the movement of the position of the pontoons or stakeboats, for example "Lane 2: out half a metre… stop."
- Be aware of the practical adjustment on the pontoons, i.e. if there is a short boat and the operator is already at full extension but is still 50 cm short, you are going to have to ask for the pontoon to be moved further to compensate. Try to do this as soon as possible after you realise as this takes a few moments.
- The stern of each boat should be held on the same side of each pontoon/stakeboat and held far enough away to avoid any contact with the boat or its rudder. Boats should be attached on the upwind side of the pontoon/stakeboat.
- Watch for boats becoming detached by crews paddling forward to straighten up.
- When aligning, allow for lateral drift of boats when crews deliberately head into the wind (this occurs when there is a strong crosswind). As the boat straightens, its bows will move forward.
- At intermediate starts, as crews straighten themselves and pull on blades, there can be a temporary forward movement of the whole line of stakeboats as a result of their connection to a common cross course cable.
- When all crews are aligned, a white flag should be held well clear of the Judge at the Start's/Aligner's hut; it may be helpful if an announcement is also made to the Starter and/or Assistant Starter to indicate "crews aligned". Some courses have a white light on the outside of the Aligner's hut instead.
- Small adjustments to alignment can still be made while the white flag/light is shown. However, if crews go significantly out of alignment, announce this clearly to the Starter and withdraw the white flag. Avoid doing this late in the start sequence wherever possible. The Starter should not be placed in the position of starting the race with crews unaligned.
- If the Start was 'good', continue to show the white flag for 10–15 seconds and check that the Race Umpire has seen it, or has had the chance to see it.
- In the event of a False Start, show the red flag immediately and ring the bell. If practicable, the red flag should be waved but this is not usually possible from within the Judge at the Start's/Aligner's hut.
- Take care to identify the offending crew(s) and inform the Starter. Crews should be identified by name, not just by lane or bow marker number.
- The Judge at the Start can also assist the Starter by identifying crews which should not be at the Start, those who are wearing the wrong kit, a missing a lane number on the bow, etc.
- The Judge at the Start should aim to achieve the best alignment reasonably practicable in the weather conditions, noting that it is unfair to the crews if the Start is unreasonably delayed while attempting to achieve an unrealistically close alignment.

Timing/Video Equipment

Any computer-controlled timing system or video system for aligning should be understood

and operated by the Judge at the Start. Instructions should be available.

3.3. Starter

Responsibilities

- Confirm the crews to start and allocate the lanes they will occupy.
- Confirm the outcome of the race to the crews.
- Conduct the Start and be responsible for its fairness.
- Award Official Warnings where appropriate for lateness or for False Starts, and announce Official Warnings awarded elsewhere for other offences such as circulation pattern violations.

Equipment and Checks

- Flags and a bell (the red flag may have a white cross to improve visibility) or an equivalent 'flip-disc' or light system. In the latter cases, the flag and bell are still needed to indicate False Starts or as back-up in the case of system failure.
- A system of markers or lights for identifying crews that have received Official Warnings.
- Programme, continuously or regularly updated with the crews in each race and outcome, clipboard with rain protection and suitable pens/pencils.
- Weatherproof clothing.
- Means of communication with the Judge at the Start, Race Umpire, Chief Judge/Judge(s), Race Control, Control Commission, and Race Committee Chair.
- Direct communication with the crews through a suitable loudspeaker system (including behind the start when required).
- Binoculars (highly recommended for checking the presence of crews).
- Watch showing Regatta time.
- Clock that is visible to crews showing Regatta time.

Start Procedure

The wording must be kept simple, clear and to a minimum bearing in mind that:

- The Judge at the Start (and the Aligner) will check that the crews are level;
- The crews are responsible for their straightness and readiness to race.

The recommended technique is given below.

Start Technique

It is the crew's responsibility to be attached at the Start two minutes before race time. However, to avoid misunderstandings, it is normal to give crews time checks, counting down to the race's start time. If crews are present in good time, allocate lanes to them (where it is safer for them to warm up) and announce a time check to the race's start time. Crews must row into their allocated lane following the published instructions.

A countdown should begin, in principle, five minutes before race time or, if later, as soon as possible after the previous race has cleared the Start. The initial announcement shall include the race number, event, crews and lane numbers, and number of minutes remaining to the start time. Subsequently, during the countdown, only the time remaining to the start needs to be given. Where possible, the countdown is given each minute but this is not mandatory.

If crews enter from the side of the course, announce the crew with the lane furthest from the gathering point first. If they emerge one at a time from a separate warm up area, announce the allocated lane for each crew as it comes into sight and earshot.

Once a crew is allocated a lane, it should proceed to its lane and, while paying attention to the other crews entering the course, may practice in its lane if time allows.

In a race where fewer than six crews appear at the Start, the Starter should consider whether the racing lanes offer fair and equal racing. The Race Committee Chair may have already determined the default lanes to use when fewer than six crews are to start and should be consulted if possible.

If weather conditions are equal in all lanes, crews should race in the lanes in which they are drawn. The Starter may decide to race crews in adjacent lanes offering the most equal conditions, but if you do this, you should inform Race Control, timing and the Judge(s) at the Start and the Finish.

Even if weather conditions are fair, the Starter can still change the allocation of lanes if appropriate, e.g. if there are crews in lanes 1, 4 and 5, the Starter may decide to move the crew from lane 1 into lane 3 to be adjacent to the other racing crews. Similarly, at courses like NWSC, if there are crews in lanes 1, 2, 3, 4 and 6, the Starter may move the crew in lane 6 into lane 5 so it is closer to the other racing crews. This action also reduces the risk of collision with boats going towards the Start in lane 7.

At three minutes until race time, it may be helpful to tell crews to get attached if they are obviously not doing so. The significant point in the countdown is at "Two minutes" as this is the point when all crews must be attached and are under the Starter's control.

Assistance with getting attached may be given to young or inexperienced crews. There is, however, a limit on the time that can be spent assisting inexperienced crews. Remember the other crews who have already attached and consider whether they should be kept waiting, possibly in wet and cold conditions. If necessary (and if possible), ask another member of the Start team at ground or water level to assist crews rather than giving instructions from the Start tower. At some courses (e.g. Peterborough or Tees), the Starter is situated at ground level and may be best placed to assist the crews.

It is a crew's responsibility to respond quickly to instructions while being aligned and to keep their boats straight.

A crew's gamesmanship or incompetence should not be allowed to delay the start.

At "Two minutes" or when all crews are attached (whichever is the later), the Starter shall announce any Official Warnings that have been given to any of the crews. This announcement shall take the following form:

> Name – Infringement – Penalty
>
> e.g. Derby Rowing Club – late at Start – Official Warning – please acknowledge.

The crew(s) concerned must always be checked to ensure they have acknowledged the Official Warning. Marker discs or lights should be used as appropriate to indicate the Official Warning and these shall then be removed once the race has successfully started.

The Starter shall then re-announce the race number, the event and clearly state the outcome of the race. To avoid confusion with the 'Roll Call', the crew names are not given at this stage.

If the race is using the Masters handicap system, this must be explained at this stage (see Masters Handicap Races below).

Carry out these final checks before continuing with the start sequence:

- The Race Umpire is present and ready (launch engine running and umpire usually standing);
- The course is clear;
- There is no undue wash from launches;
- The crews are in their final stages of preparation;
- The crews are all attached and aligned;
- All other Officials (and safety boat if appropriate) are ready.

After the Aligner indicates the crews are aligned, the Starter will conduct the 'Roll Call', in which crews are named in turn, starting from lane 1. This serves to check that the correct crews are present and provides a warning that the Start is about to begin.

Even when conditions are good, the 'Roll Call' should not be started until the crews are aligned as there may otherwise be a long delay before the race actually starts. Lane numbers are not used as part of the 'Roll Call'; it should take the form of: Nottingham, Kingston, … etc. Try to keep the 'Roll Call' as short as possible: use the terms that the Race Umpire would use to warn a crew on the water. For example, there is no need to say "Rowing Club" after the club name unless it is necessary to avoid ambiguity (e.g. Leicester Rowing Club and Leicester University in the same race). Composite crews can be identified using the form: Molesey Composite, Derby Composite, etc.

If time is short or weather conditions are poor, the 'Roll Call' can be started during alignment, but try to judge when the Aligner is nearly finished so that the crews are not kept waiting too long after the 'Roll Call' until the start of the race.

In exceptional circumstances, the Starter may omit the 'Roll Call' (having told the crews that they are doing so: "There will be no Roll Call") and begin the Start from the word "Attention" (Rule 7-3-4k).

The word "Attention" should be calm, clear and controlled; there should be a distinct pause between the name of the last crew in the Roll Call and "Attention."

For a Start using flags, there shall be a pause between "Attention" (the emphasis here is that the red flag is raised slowly after "Attention") and a variable pause from when the red flag is fully raised prior to the command "Go".

For a 'flip disc' or light system, the red disc or light should be used in a similar way: a pause after the word "Attention" is given with a variable pause before the red disc or light is used. At some regattas, if a mechanical red/green 'flip disc' or light system is being used, it may be necessary to inform crews of how the system operates as not all crews may be familiar. If there is any doubt, ask the crews if they wish to have the system explained or demonstrated.

It has been suggested that the variable pause should be between two and four seconds. This will depend on weather conditions but Starters should avoid using a pause of consistent length as crews may anticipate the Start based on their experience of earlier races.

When the red flag is used, it shall be raised and held across the line of vision of the crews, using both hands, one on the stick, the other on the top corner of the flag. In the event of the start sequence being interrupted for, in the opinion of the Starter, a legitimate reason, the Starter shall say "As you were" and the red flag be slowly lowered straight down to avoid any interpretation that the Start is being given. Normally after an interruption, and certainly after any long delay, the start sequence should recommence from the 'Roll Call', but may start from the word "Attention". Do not interrupt the start sequence simply because a crew has a hand raised; the start should only be interrupted for a legitimate reason, e.g. a crew may have their boat pointing towards an adjacent lane and it would be unsafe to allow the Start to continue, or the crews may no longer be aligned. In either case, it would be advisable to explain the delay to the crews and then tell the crews when you are ready to proceed again.

Crews are not able to delay the start procedure after the Roll Call begins.

The down sweep of the flag shall begin at the same time that the word "Go" is given.

All words of command and movement of the flag must be full and clear.

Start Sequence (if regatta is on time)

- When crews come into the Start zone or at five minutes (or as soon as possible if time is short before race time), announce the race number, event, crews and lane positions and time remaining until the race start time.
- Observe crews for safe actions when they are entering lanes and practising.
- Announce time to the start at one-minute intervals until two minutes until race start time.
- Aim to have the crews attaching at three minutes to race time. At this point, you cannot instruct them to get attached but you can ask them to do so. It is the crews' responsibility to be attached two minutes before the race start time.
- Observe the attachment of crews to start pontoons or stakeboats.
- If possible and where necessary, assist inexperienced crews to get attached.
- Observe the readiness of crews.
- Announce "Two minutes". Crews must be attached and ready to race at this point.

- When all crews are attached, announce any Official Warnings (Name – Infringement – Penalty), check that the crew(s) concerned have acknowledged the warnings and place markers or switch on marker lights as appropriate.
- Re-announce the race number, event and announce the outcome.
- If using the Masters handicap system, explain the start arrangements (see Masters Handicap Races below).
- Check all umpires (and safety boat if appropriate) are in position and ready.
- Check the course is clear.
- Check there is no significant wash present.
- Check if crews are aligned and await alignment if necessary.
- Carry out the 'Roll Call'.
- Check the state of alignment again.
- Check the readiness of the crews.
- If you are satisfied that all are ready, straight and aligned - say "Attention" and:

  (a) If flags are being used: raise the red flag slowly, pause (variable), say "Go" and simultaneously drop the flag to the side.

  or

  (b) If 'flip discs' or lights are being used: pause, press the red button, pause (variable) and press the green button.

  In both cases, keep watching the crews all the time. If you have an assistant, ask them to observe the crews during the start.
- Check that the Judge at the Start's white flag or white light is still showing, i.e. no False Start.
- Think: was the Start satisfactory, did all crews have the opportunity to get away cleanly?
- If the Start was satisfactory, observe the race until the crews have cleared the Start; this may be done by an assistant.
- If the Start was not satisfactory, reinforce signals for a False Start: ring the bell and wave the red flag.
- Stop the crews, call them back to the Start and reattach after a False Start.
- Disqualify crews that have accumulated two Official Warnings prior to them reattaching to save time, but make sure that the other crews are aware that this has been done.
- Award other Official Warnings where appropriate when all crews are attached. Check that the crew(s) concerned have acknowledged the warnings and place markers or switch on marker lights as appropriate.
- Restart the race from the 'Roll Call'.

Start Sequence (if regatta is running late)

- When crews come into the Start zone, announce the race number, event, crews and lane positions and say "three minutes".
- Observe crews for safe actions when they are entering lanes.
- If crews are not obviously getting attached, suggest that they do.
- Observe the attachment of crews to start pontoons or stakeboats.
- If possible and where necessary, assist inexperienced crews to get attached.
- Observe the readiness of crews.
- Announce "Two minutes". Crews must be attached and ready to race at this point.
- Follow remainder of the process as though the regatta is on time.

Start Sequence (if regatta is running early)

- When crews come into the Start zone, announce the race number, event, crews and lane positions and time remaining until the race start time.
- Observe crews for safe actions when they are entering lanes and practising.
- Observe the attachment of crews to start pontoons or stakeboats.
- If possible and where necessary, assist inexperienced crews to get attached.
- Observe the readiness of crews.
- If all crews are attached and ready to race well before race time, the Starter may ask them if they wish to start early or wait until the scheduled race time.
- Races can only be started early with the approval of the Race Committee Chair. This can be requested for individual races or the RCC could give overall approval for races to be started early.
- The wording is: "I propose to start this race early. If you would prefer to wait until race time, please indicate." (Rule 7-3-4a).
- If all crews are happy to start early, the Starter shall announce "Two minutes".
- Follow remainder of the process as though the regatta is on time.

Weather Conditions

- Observe the water conditions in all lanes in the Start area. Consult with the Race Umpire and/or the Race Committee Chair on the conditions along the course. The Race Umpire may decide that some lanes present a particular advantage or disadvantage and may position crews accordingly where possible. If crews are moved across lanes, the original order of the draw must be retained. Inform the Judge(s), Race Control and the timing team of any lane changes.
- If possible and where necessary, assist crews on the start to maintain a steady position by suggesting that they point their bows into the wind.
- If possible and where necessary, assist inexperienced crews to attach in crosswind conditions.
- Where necessary, suggest that bow-side use stroke-side's blades or vice versa to minimise the forward pull on the boat during straightening, i.e. "2 paddle on with

bow's blade or 3 paddle on with 2's blade". You may use any words to achieve the desired effect. Remember that you cannot instruct crews in this: you may offer assistance, but it is the crew's responsibility to get and keep itself straight.

- If weather conditions are particularly poor, the Starter may decide to amend the Start procedure, e.g. starting without a 'Roll Call'. In such cases the Starter must inform the crews of the wording and Start procedure that will be used (Rule 7-3-4k).

Late Crews

A regatta should be consistent in its attitude towards dealing with latecomers. Find out what the regime is before beginning your session on the Start. Possible courses of action include:

- If a crew is absent shortly before race time, check with Race Control and/or Control Commission to establish if there is an acceptable and legitimate reason for lateness. Where Race Control has allowed a crew to be late this effectively reschedules the race. Crews present on the course and at the Start should be informed. If no such permission has been given, then the Starter may start the race on time in accordance with the Rules.
- In the event of minor lateness without reason, award a penalty of an Official Warning. This is a matter of judgement and the circumstances, e.g. fairness to other crews who may have arrived on time and may now be cold and wet.
- A crew that is late for no good reason and has rushed to get to the Start should be given an Official Warning as it might otherwise cause a False Start in order to give itself a further period of rest.

Crew Readiness

It is a crew's responsibility to be ready to race at the appointed time.

- Prior to starting the 'Roll Call', check that all crews in the race look as though they are ready to race, i.e. are in racing uniform, are still attached and appear to be straight (or as close as possible in the event of a crosswind).
- In coxed boats, the cox will raise a hand to indicate that the crew is not ready. In front-loader boats, the crew member at bow will usually raise their hand as it can be more easily seen.
- A raised hand must be seen to be associated with some remedial action being taken. If a crew is holding up the Start unreasonably in this manner, the Starter may announce that they will start without further reference to signals from the crews when satisfied that the crews have had time to get ready.

Masters Handicap Races

Masters handicap races at multi-lane regattas are started in exactly the same way as they would be at a two-lane regatta unless there are more than two age categories in the race (Rule 7-3-4d).

For example, if there were three age categories with handicaps as follows:

1.	Derby	Mas A	no handicap
2.	Derwent	Mas C	11 seconds
3.	Leicester	Mas B	5 seconds

The 'Roll Call' would be as normal: "Derby, Derwent, Leicester", pause, "Attention", raise the red flag slowly, pause (variable),

and would continue:

"Go" and simultaneously drop the flag to the side, "5 – 4 – 3 – 2 – 1" (raise flag with 1) – "Go – 4 – 3 – 2 – 1" (raise flag with 1) – "Go."

Derwent would start on the first "Go"; Leicester on the second "Go"; Derby on the third "Go".

The Judge at the Start would call a False Start in the same way as normal if any of the crews cross the Start line before their "Go" signal.

3.4. Assistant Starter (where provided)

Responsibilities

- Keep the Starter's programme up-to-date from Race Control.
- Contact Control Commission/Control Commission Recorder/Race Control regarding late and absent crews.
- Check the presence of crews for the next race.
- Assist the Starter in getting crews to the Start.
- Assist the Starter, if necessary, by providing updates on the state of the Aligner's flag/light during the final stages of the start.
- Assist the Starter, if necessary, to check the readiness or otherwise of all crews during the final stages of the Start.
- Assist the Starter, if necessary, to monitor the flag/light of the Judge at the Start to check for False Starts.
- Assist the Starter, if necessary, to observe the race until crews have cleared the Start.

Equipment and Checks

- Programme, continuously or regularly updated with the crews in each race and outcome, clipboard with rain protection and suitable pens/pencils.
- Weatherproof clothing.
- Binoculars (highly recommended for checking the presence of crews).
- Megaphone.

3.5. The Race Umpire

Responsibilities

The Race Umpire's responsibility for a race, once allocated, begins from before the start and continues up to and after the finish. The Race Umpire makes all the decisions concerning the race (in co-operation with other Race Officials where necessary).

- General responsibility for safety at all times. Be alert wherever you are on the course and maintain spatial awareness. Check the course for any obstruction or hazards.

- Ensure that the race is conducted in accordance with the Rules of Racing.
- Ensure that all crews have an equal opportunity. This applies to lane, water and weather conditions as well as to the interaction between crews. It is important to focus on the outcome of the race: each crew should have an equal chance of progression based on the draw system and the conduct of the race. All courses can be unfair in certain wind conditions and in such cases, it is the responsibility of the umpire to communicate any concerns to the Race Committee Chair, who shall be responsible for taking any necessary remedial actions.
- When umpiring from a launch, to position it correctly.

Equipment and Checks

- When umpiring from a launch: launch and driver capable of positioning the umpire and enabling him to operate the megaphone, flags and bell. The launch must be equipped with the appropriate safety equipment (RowSafe contains the full list of safety equipment). All those in launches must wear a life jacket or buoyancy aid.
- When umpiring from land: a position of suitable height and stability to offer adequate supervision of racing and to communicate with crews on the course.
- Megaphone, red flag, white flag and bell.
- Programme, continuously or regularly updated with the crews in each race and outcome, racing record sheets, clipboard with rain protection, bulldog clips and suitable pens/pencils.
- Watch showing Regatta time.
- Weatherproof clothing.
- Binoculars.
- A radio or means of communication with Race Control and other Race Officials. Not all regattas will issue radios to umpires, so it is important to identify how you might communicate with Race Control, the Race Committee or Safety in an emergency or for critical matters relating to the race programme.

Weather Conditions

Some weather conditions may affect racing and actions may need to be taken to address these.

- A partial crosswind can cause serious variations in the surface conditions on the course and some lanes may be sheltered more than others. It is an umpire's responsibility to assess the fairness of the conditions in each lane and to advise the Starter accordingly. Wherever possible, crews should race in lanes that have equal conditions. This may mean avoiding the use of a calm lane.
- Strong crosswinds may cause difficulties for the crews on the start. A cross head-wind is particularly difficult: once attached, crews should point their bows into the wind until the start is underway. A cross tail-wind is generally not as troublesome.
- Strong winds along the course may cause rough water conditions which can be damaging to boats and lead to boats becoming waterlogged or swamping. This may cause the regatta to be halted by a decision of the Race Committee Chair and/or Safety Adviser (Rule 7-1-1) (or, in exceptional cases, by the decision of any Race

Official). It is important that all Race Officials see that crews return to shore safely and that the course is checked to ensure no crews are at risk.

- If racing is suspended due to unsafe weather conditions, it is important that further crews are prevented from boating. Whoever stops racing must inform Control Commission to prevent further crews going afloat.

Crews Returning Without Racing

A Race Official may need to return one or more crews to the boathouse for a variety reasons including:

- poor weather conditions (see above)
- damaged equipment
- injury to competitors
- disqualification

In such situations, attention should be given to the circulation pattern and the impact of a potentially slower crew on the same section of water used for racing. If crews are returning to the boathouse under abnormal conditions, this should be communicated to Control Commission and Race Control.

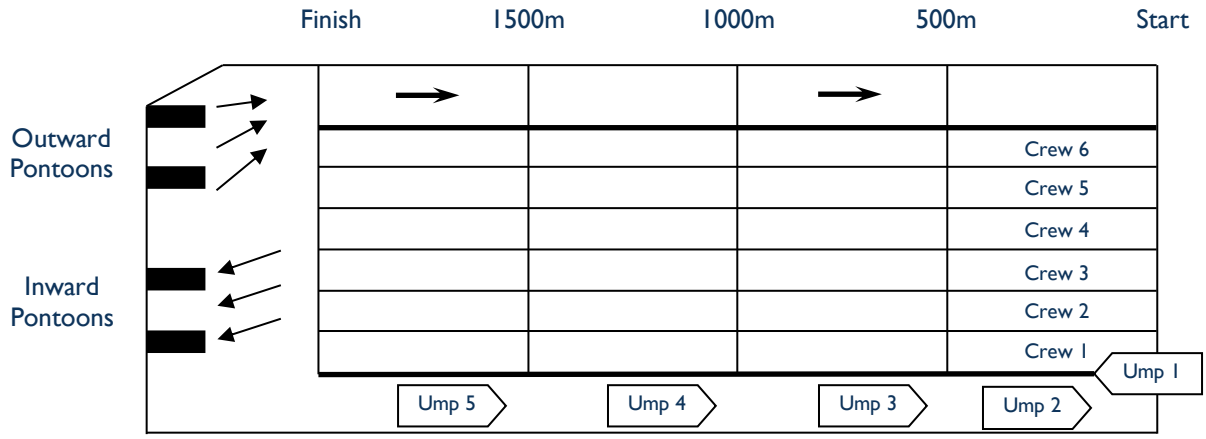
Launch Control

The majority of multi-lane courses use launches for umpiring. Whilst the detail of how the launches operate may vary from course to course, there are some common guidelines such as:

- All drivers should have an appropriate qualification to drive the launch (e.g. RYA Powerboat Level 2 certificate).
- The umpire is in charge of the launch positioning at all times and shall direct the driver with regards to position and speed during racing and returning.

On the Way to the Start

On the way to the Start, the launch should follow the prescribed launch movement pattern and be cognisant of the need to minimise wash. Depending on the number of launches in operation, this may involve a 'suppléant' (reserve) pattern with launches evenly spaced along the length of the course. Umpires waiting at these points should be ready to take over a race in the event of a failure of the launch already in operation or other incident requiring assistance.



The type of launch being used and the characteristics of the course both influence the launch movement pattern. For example:

- A dory-type launch creates significant wash at low speeds. The umpire should monitor the wash and its effect on marshalled crews at all times. When returning to the start, the only option is to use it on the plane and proceed up the centre of the course.
- Catamarans can go quickly up the centre of a course but they create a fairly significant rolling hull wash (as opposed to a bow wave). This method is infrequently used, but may be needed after a very slow changeover or another breakdown in the launch circulation pattern.
- If the high-speed central system is used on any course, the launches should slow down to a trickle **before** turning to go off to the side, as this sends the wash to the sides instead of a high wave all the way along the course.
- Ideally, only catamarans would be used with sufficient numbers (e.g. six) to allow all to crawl down lane 0. What is sufficient for each particular regatta depends on race intervals and how strictly the suppléant pattern is adhered to.

Umpires should observe the following (and undertake any necessary remedies or actions):

- Passing races (being prepared to take over the race in the event of a failure of the launch following the race).
- The condition of the fixed features of the course, e.g. buoys.
- The effect of weather on the course.

- Nearby crews, checking they are obeying the regatta's circulation pattern.
- Safety launches, checking they are in position and ready to assist if called upon.
- The course, checking for any obstructions and if found, ensuring their removal.

At the Start

- Check that the launch engine is running when the start procedure begins.
- Check that your programme is up-to-date; if you do not have the details for the race, check with the other start officials (Starter, Assistant Starter, Start Zone Supervisor, Judge at Start, Aligner, etc.). The names of all the crews in the race, their lanes and the outcome of the race must be known.
- Be alert and be seen to be ready for action when the start sequence begins.
- Check that the Starter can see you and that you are ready. This is usually done by standing up after "Two minutes" is announced.
- During the start sequence, ensure that the launch is away from and slightly forward of the start pontoon. It should not be allowed to block the Starter's or the Judge at the Start's view of the crews and the start line. Exact positioning will depend on the layout of the Start.
- Check the state of readiness of the Judge at the Start/Aligner and of the crews throughout the start sequence.
- Check that the Start is fair, bearing in mind that the Judge at the Start/Aligner is in the best position to see a False Start.
- Immediately after the Start, check if the Judge at the Start or the Starter has called a False Start.
- If there is a False Start, reinforce the signals: ring the bell, wave your red flag and order the crews to stop.

During the Race

- After the Start, check the positions of the crews to see that they are established in their correct lanes. If no immediate action is required, position the launch to a suitable general observation position near to the centre of the course.
- Assess the strengths and weaknesses of all crews as soon as possible.
- When not engaged in warning crews, keep the launch back from the crews to avoid disturbance but without losing contact with the race.
- Be aware of what is happening: anticipate what could happen and what action you would take if an incident develops. Do not fall into a false sense of security during a race, even if the outcome appears clear and the crews are well apart. Concentrate on all aspects of the race, scanning the whole course at regular intervals.
- Do not keep the launch in a fixed position in one lane for the whole race. In general, position the launch to one side of a lane and do not 'nag' any crew by unnecessarily remaining in a single lane for the whole or majority of the race. On the other hand, do not overdo 'moving about', as crews may interpret this as a sign that you are about to warn them. If the launch stays in the centre of a lane, it could assist the

crew in that lane with steering or, conversely, may obscure the crew's view of course steering markers (if present).

- As far as possible, without compromising the correct positioning of the launch for umpiring purposes, avoid washing down trailing crews. If a crew must be passed by the umpire launch, the manoeuvre should be done as quickly as possible with the least amount of disturbance. If possible, a crew that is about to be washed down should be warned that this is to happen.
- Avoid obstructing the view of crews that have fallen behind the leaders. Such crews may still be racing for a place or to avoid last place.
- As far as possible, do not block the view of those working at the intermediate timing points by positioning your launch between the timing personnel and racing crew(s).
- **At all times remember the race outcome**. For example, if three crews out of six go through to the next round, the 'key' to the race may be between the crews in third and fourth place for the remaining qualifying place; you should position the launch accordingly. Be aware that all crews except first round losers and repêchage losers receive ranking points. For example, in a final, all six crews may get ranking points so crews that are a long way behind the race leaders should be monitored.

At the End of the Race

- Check that all the crews that are able to do so have finished the race. Take care to wait for 'stragglers' to finish.
- Check all crews for any sign that they wish to make a protest; this is usually done by a crew member raising their hand.
- Check that all rowers are sitting up in the boat to aid recovery and watch for signs of distress. Summon assistance from safety boats if necessary.
- If the race is 'in order' and there are no protests, raise the white flag and watch for acknowledgement from the Judge(s). The white flag is a signal for the Judges(s) and should be shown to the Judges(s) first. You may choose to show it to the crews afterwards, although this is not required by the Rules of Racing.
- If in doubt raise the red flag. Hear any protests, make a final decision about the outcome of the race and communicate your decision to the Judge(s) and, if practicable, the crews involved. Note that you may have to determine the crews' finishing order so remember details of warnings and incidents during the race itself; also, be ready to ask the Judge(s) for the finishing order that they observed if that information assists you in making your decision.
- If your umpiring of the race began mid-race, due to launch failure (for example), the red flag shall be raised at the finish and the announcement of the result should be delayed. The umpire who covered the second part of the race, who has become the Race Umpire, should consult with the umpire who supervised the first part of the race to check that nothing occurred at that time that might affect the official outcome of the race. Following this check, the second Race Umpire shall report any decision to the Judge(s) and the crews or raise the white flag to signify that the race was in order.

- The Race Umpire is responsible for the race but is able to consult, as appropriate, before making or confirming any decisions.
- Remember: the umpire's decision is final. However, you may reverse your own decision in light of new information.

Warning for Steering

Subject to the following, an Umpire must not steer a crew.

A crew that crosses over the limits of its allocated lane and, by doing so, may gain an advantage or cause a disadvantage or hazard to another crew should be warned. Position the launch behind the offending crew, raise the white flag to vertical, name the crew and lower the flag sideways to the horizontal at arm's length in the direction in which the crew is to move. If there is a satisfactory response, drop the white flag smartly to a position where it is concealed from the crew. Where a crew is slow or reluctant to respond, do not hold the flag out indefinitely waiting for action but repeat your warning. Remember the number of warnings given to each crew as this may assist you in determining the need to disqualify a crew.

Where crews approach one another along a line of buoys, move to a position between and behind both crews, raise the flag vertically, hold it there, name both crews and instruct them to "move apart".

For safety reasons, crews may be given some steering instructions to avoid a collision with a temporary obstruction on the course or with another crew that is not part of the race. If a collision with an obstruction becomes unavoidable, the umpire shall raise the white flag vertically, name the crew and tell it to "stop". An umpire can stop a crew for safety reasons and once in a safe position, that crew can restart and be placed in the race.

A crew is out of its lane when the blade tips pass over the line of buoys marking its allocated lane.

React quickly when crews are level and begin to converge if there is a possibility of a collision. When there is clear water separating the crews in the direction of racing, minor wanderings off the racing line need not give rise to action. However, the situation must be monitored carefully where a wandering crew is ahead of the crew in an adjacent lane as the crews may close up later or the trailing crew may be interfered with by the leading crew's wash. Knowledge of the outcome of the race may influence your actions.

Crews that are moving out of their lane but not gaining any advantage and not interfering with the progress of other crews shall not be warned except for safety reasons. A crew drifting off course, particularly into a navigation lane, must be monitored carefully to ensure it is not at risk nor poses a danger to other crews.

Steering problems are most likely at the beginning and the end of a race. Off the start, crews may not be pulling evenly on both sides of the boat and they may not be straight when leaving the start pontoon or stakeboat. In the final stages, they can be disoriented due to fatigue causing unequal pulling and lack of attention to steering and boat position. Scullers and other coxless boats racing level in adjacent lanes near the finish of the race may move towards each other.

At all times, watch for tired crews lingering in the finish area as they may be a hazard for crews racing across the finish in subsequent races. During finals in the area around the

finish, watch for crews going to and from presentation rafts or waiting in that area where they risk being blown onto the course.

Umpiring 'Do Nots'

- Do not call a False Start unless it is clear that either the Starter or the Judge at the Start has failed to see a False Start or the Start sequence itself was not acceptable.
- Do not let a race continue further than necessary when a problem develops in the early stages. If there is significant doubt, err on the side of caution and stop the race.
- Unless the crews' safety is at risk, do not stop a race for crews who were both equally out of their own water, foul each other and then row on, unless you believe that one of the crews is at fault and its interference was the root cause. Note that in such circumstances, warnings would have been given and that an instruction to "move apart" is a warning to both crews.

3.6. Chief Judge/Judges

Responsibilities

- Chief Judge: determine the order in which the boats cross the finishing line and declare the finishing order of the race, in consultation with the other Judge(s) and sign a record of results.
- Chief Judge: allocate roles to the other Judge(s).
- Chief Judge: work with the Race Umpire and Race Committee as necessary on situations where a race is not in order and consequent action is required.
- Judge(s): assist with the above duties. It is recommended that there is at least one additional Judge, preferably more (Rule 6-1-5f)
- Judge(s): maintain a written log of all results as racing progresses. Include the original order the crews crossed the line and the final result if there is a difference. Note the Race Umpire's name for each race in case of subsequent discussion or protest.

Equipment and Checks

- White flag or white light to acknowledge the Race Umpire's signal at the end of the race.
- Means of communication with the timing team to inform them of the order the crews finished.
- Communication is also important with any commentary team (which may be separate from the timing team) so that 'results' are not announced until the Race Umpire has 'cleared' the race and the Judge(s) are satisfied with the final finish order and times.
- Means of communication with the Starter/Assistant Starter for any last-minute changes.
- Programme, continuously or regularly updated.
- Binoculars.
- Megaphone.
- Sighting marks/line for the finish line.
- Timing system, electronic or manual (only present on some courses).

- Check the Judge(s) are able to clearly see all the lanes across the course along the sight line. For this, it is normal that the Judge(s) are elevated above the water line with a clear view of all the bowballs as they cross the line.
- Full record of all race results.
- A button pressed by a Judge as each crew crosses the line to initiate a light and/or hooter for crew information. This may also be linked to the timing mechanism.
- Photo finish equipment (only present on some courses).

Notes

- The Judge(s) at the finish should be alert at all times to activity within the finish area. Crews that are tired after racing, competitors in physical distress or crews not following the circulation pattern are a safety hazard. Subject to safety considerations, Judge(s) must remember that their prime function is to determine the order of finish of each race.
- Do not release any result until the Race Umpire has raised the white flag. Remember to acknowledge clearly with your white flag or white light.
- If the Race Umpire raises the red flag, do not announce any order of finishing until you have had instructions from the Race Umpire.
- Ensure the result is not given until absolutely certain that it is correct.
- Photo finish/video equipment may be in use and may be operated by separate technicians. This equipment should be used if there is any doubt about the order in which the crews have crossed the finish line (for any position). Before racing starts, contact the photo finish team and check that the equipment is working, including the print facility. It is advisable to familiarise yourself with the screen layout and how it works. Check that the equipment covers all racing lanes. Note that crews straying out of the outer lanes into safety lanes may be out of the line of vision of the photo finish equipment. Generally, the zoom function on the photo finish equipment is sufficient to help the judges make a decision but, if necessary, print-outs can also be used. If the photo finish equipment is used, times may need to be adjusted to match the photo finish results.
- Be aware that crews can change lane during the race and may not cross the finishing line in their allocated lane. Check bow numbers; it is always helpful to have some knowledge of crew colours too.

4. Time Trials on Multi-Lane Courses

4.1. Introduction

Time trials (TTs) are becoming more common at our multi-lane competitions. They can be used in times of poor weather conditions, enabling a competition to continue when fairness or safety may have meant abandonment of side-by-side racing, or more often as a way of qualifying, eliminating or seeding crews for subsequent rounds of competition.

4.2. Guidance

Circulation Patterns

At present, most competitions do not allow any warming-up or cooling down when a time trial is in progress. This keeps circulation patterns and marshalling very simple: in principle, the competition should have some land-based warm-up and cool down facilities such as ergos in place.

Crews will progress to the start in a lane well away from the racing lane(s), but this may mean they will suffer in poor weather conditions which may have been considered as unfair; extra safety provisions may be needed.

Crew numbers worn by the competitors (as used in head races) are useful in identifying crews; sufficient duplicates should be supplied to allow the competitor at bow to wear one on their outer layer and one on their racing kit. Depending on the location of marshals, the cox may not need to wear a number.

Competitions may use land-based marshals and the control of crews turning into the racing lane(s) is provided either from the start pontoons, the start tower or marshals afloat. In any case, the need is for clear amplification of instructions.

Fairness

Competitions can use any number of lanes to give big gaps between crews in the same lane, but check that conditions are the same in all racing lanes. If the conditions are markedly different, it may take longer to complete each time trial in one lane compared to another. With large numbers of crews, the Organising Committee (OC) should take into consideration that the weather may change over the duration of the time trial. OCs may wish to either seed crews or, as a minimum, set crews with similar rankings together in the grouping.

Start Zone

The time interval at the start between crews is best controlled at the turning point, when the crew is invited to turn into the racing lane(s). Using multiple lanes allows more crews to be raced in a given time but they may be exposed to different weather conditions; the OC should make their final decision on which lanes should be used close to race time.

Time trials are usually raced over a distance of less than 2000m but the start pontoons/stakeboats can be used if there is sufficient time and resource to hold boats. Crew capability should also be a consideration when deciding if a 2000m time trial is appropriate.

Some crews prefer a static start over a rolling start and the start zone team should be aware of this. It is difficult to call a crew back once they are in their racing lane.

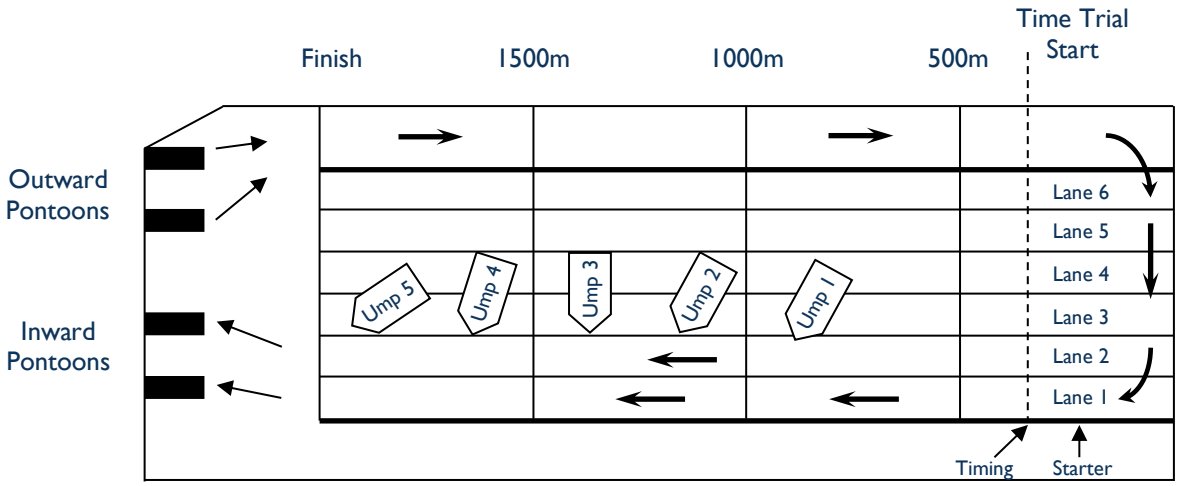
Competitions may decide that crews shall not do static starts; if so, a penalty should be agreed for any crews that do not follow instructions.

The crew is typically addressed: "Number …" by the Starter, who then says "Go". It can be helpful if the Starter can also name the crew, but this may not be possible. The Starter is positioned at least 50 metres before the timing line to allow crews to get up to speed.

The time interval between crews is typically 30 seconds. When a regatta has crews of different abilities, this time interval may not be sufficient so monitoring of crews and clear instructions on how they should move out of the way may be necessary. Typically, the overtaken crew will be instructed to move to the adjacent clear lane, but not a more favoured sheltered lane.

Umpiring

Umpires may be stationed at irregular intervals along the course to observe the overtaking process, calling to crews early enough so that they can move. Irregular positioning allows umpires to be concentrated in the second half of the course as this is when faster crews should be expected to catch slower ones. An umpire positioned in the first 250-500m of the course may have nothing to do.



An impeded crew cannot have their time result reduced, but an impeding crew may be awarded a time penalty. This is unsatisfactory and OCs may publish possible time penalties to create a deterrent along with the instructions on when and how to move out of the racing lane for a faster crew.

Umpires may be land-based or on launches. If afloat, it is good practice to station the launch between the lanes used for marshalling crews and those for racing crews, giving extra separation between the crews travelling in opposite directions.

Umpires should report to the Co-ordinating Umpire by radio with details of individual warnings a crew may have received. If several warnings have been given along the course by multiple umpires, the crew may receive a penalty. The Co-ordinating Umpire should not be the Race Committee Chair as this allows for a second tier of appeals, if necessary.

Timing

Two groups of people with stopwatches, located at either end of the course, is a basic method but still may be used. This method is being replaced with communications-enabled timing systems that enable faster publication of results. However, it is considered good practice to also use an independent back-up system. Competitions may consider the merits of also running a third timing system. They may also record intermediate times as these are useful to crews and coaches.

Publication of Results and Penalties

Consider where the results are to be published: it is now common practice to use electronic methods (website, social media, messaging apps) in addition to notice boards displaying printed copies of the results.

5. Zonal umpiring

5.1. Introduction

Zonal umpiring has long been used at multi-lane competitions but has recently come into the spotlight as International and National competitions, previously umpired using launches following races, adopt its use with the aim to provide smoother and better water conditions for the crews.

5.2. Guidance

Choosing the Umpiring System

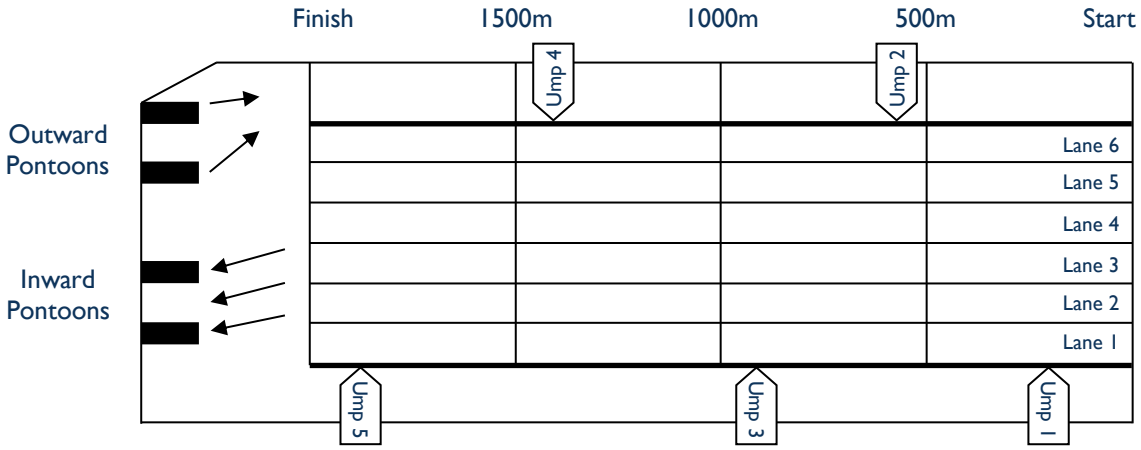
The Organising Committee (OC) are responsible for the decision to use zonal umpiring or umpires which follow races in launches. They should take into consideration factors such as: the course; race interval; weather conditions forecast; ability of competitors; age of competitors; boat types (coxed or coxless), before they decide on one system or the other.

Umpire Positions or Pattern

In principle, the umpire's actions are already covered in the Rules of Racing and guidelines for bank umpired competitions. When necessary, umpires should instruct crews to move in a particular direction and then communicate that a warning has been given so that those umpires further down the course and the Co-ordinating Umpire are aware. If there is a foul or interference, this should also be communicated down the course. The Co-ordinating Umpire will consolidate the information received from the umpires along the course and pass their decisions to the Judge (Rule 6-1-4a).

Competitions may allow an umpire that needs to give a warning to a crew to move onto the course to emphasise the warning. Some ask launches to pull gently onto the course; this improves the perspective. This manoeuvre should be carried out at very low speeds as any wash will be sent along the course length.

Umpires may be located down one side of the course or alternately on either side, which gives a better coverage. However, this may not always be possible because of the narrow width of the course. For example, at NWSC, crews proceed to the start in lane 7, with no separation from lane 6. A following umpire is best placed to see if non-racing crews are encroaching onto the course. As the zonal umpire's launch is positioned in Lane 0, they lose that advantage. Therefore, zonal umpires on the NWSC course need to be supported by umpires or marshals on the bank, adjacent to lane 7, with the specific duty of watching for wayward crews in lane 6 and 7. In the extreme, they may be forced to stop the racing crew in lane 6 and would then need to communicate with the Co-ordinating Umpire to assist deciding the outcome of the race.



Finish

At the Finish, a following Race Umpire would be checking on crew welfare, positioned to listen to immediate protests and able to signal to the crews and Judge(s) that the race is in order. OCs should consider how these separate responsibilities are to be covered when zonal umpiring is used. It is most likely that a launch-based umpire will position behind the race at around 1950m and close on the crews to take care of welfare and protests.

The Co-ordinating Umpire should base themselves in a position where they have the best view possible of the whole course so they can observe as much of the race as practical. Note that the Rules state that when there is a Co-ordinating Umpire, they shall be part of the Race Committee; this means that the Race Committee may change during the competition. (Rule 6-1-4a)

6. Incidents and umpires' response

6.1. Introduction

This section includes a number of examples of the scenarios that can be encountered in multi-lane racing. These examples are based on a six-lane course, but the same basic principles apply just as easily to four or eight lane courses. Generally, an umpire must make a decision quickly and correctly. However, there may be some circumstances where a quick decision is not possible and additional information is required from others so that the correct decision can be made.

Every season, new situations will be encountered and solved; umpires are requested to keep the MLUP fully informed, especially regarding challenging scenarios. These experiences can be added to this Guide as appropriate to help build the body of knowledge for all.

6.2. Objective

It is not possible or desirable to attempt to catalogue every possible scenario that can arise in multi-lane racing. The objective of this section is to help umpires obtain a clear idea of what may be the best course of action in specific situations. The basic understanding developed using these examples will equip umpires with confidence and knowledge when encountering a wider range of situations.

6.3. Guidelines

In the event of an incident involving disqualification, the crew at fault is easily dealt with, but an umpire must ensure that no other crew(s) has been disadvantaged. It should be recognised that, in some cases, there may be an alternative to a re-row. Unless the race concerned is a final, a re-row can be a significant disadvantage to a crew or crews as a result of fatigue associated with what will be an additional race for some but not all crews in the event.

If possible, consideration should be given to placing crews in an appropriate finishing order, particularly when the incident occurs towards the end of a race.

If an incident occurs early in a race, the imposition of a re-row is much less severe: the race should be stopped before the majority of the distance has been completed to enable the race to be re-rowed.

A clear appreciation of the outcome of the race should be at the forefront of the Race Umpire's mind at all times and the consequences of a re-row and its effect on the crews involved should also be considered.

The following are guidelines which can be followed.

Finals:	Any crew in contention when disadvantaged will need a re-row. This is not a problem since all crews would be uniformly affected.
Semi-finals:	As for Finals, but now a re-row potentially becomes a disadvantage unless there is clearly enough recovery time between the re-row and the Final. If a finishing order can be determined in a race that is stopped just after the incident and close to the finish, this is the best option.

Heats/Repechages:	As for Semi-finals. If time permits adequate recovery time before the next round then a re-row may be possible. If only one crew was disadvantaged and there is room for an additional crew (see below) in the next round, or if appropriate in a repechage (this is only appropriate if the disadvantaged crew would have ended up in the repechage had it not been disadvantaged), it may be possible to allow the crew to move forward in this way.
Re-rows:	Re-rows should involve the minimum number of crews necessary to restore the chances of the disadvantaged crew(s).

For safety reasons and for fair racing, the number of crews taking part in any race should never exceed the number of lanes that are fully equipped and are to the necessary standards with regard to overall depth etc. On a six-lane course, the use of a safety or access lane as an extra/emergency racing lane is not permitted.

7. Case Studies

7.1. Interference

Event: Any 2000m; Race: Any; Outcome: 2 to Final

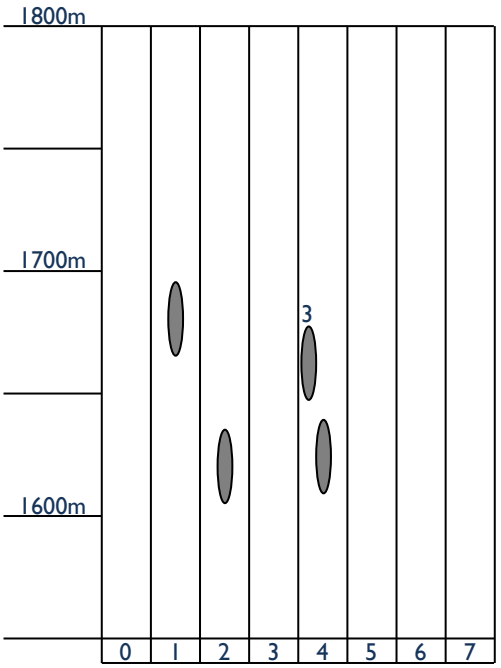
Situation:

i. 3 interfering with 4

ii. 3 repeatedly warned; no response

iii. If 3 disqualified, 4 in contention for 2nd qualifying place

iv. If 3 stopped, action would stop 4.



Actions:

A. i. Return 3 to lane, stop only 3 and disqualify 3
ii. Assess finishing position in consultation with Judge(s) and place 4 over 2 if appropriate (or re-row 2 and 4).

B. i. Move 4 from behind 3
ii. Stop only 3 and disqualify 3
iii. Await outcome
iv. As in A.ii. above.

C. i) Allow race to complete, disqualify 3 and determine qualifying finish order (or re-row affected crews).

Notes:

Continued interference will affect 4's chance to qualify and to race under fair and equal conditions. This must be considered in the final result.

The crews are close to the finish line; the Race Umpire could disqualify 3 and re-row other crews, but there is a disadvantage to these crews compared to those who qualified in other heats.

Option A is preferred if it can be implemented.

On consultation with the Judge(s), if the distance between 2 and 4 does not allow the result to be determined, and there is doubt as to which of 2 or 4 would have qualified, then a re-row is the fair option.

For Option C, does the competition venue accommodate a 7-boat final? If yes, progress both 2 and 4 to the Final.

The umpire's decision will be determined by their judgement of the impact of the interference on the result of the race.

7.2. Foul

Case 1

Event: Any 2000m; Race: Final; Outcome: Gold/Silver/Bronze

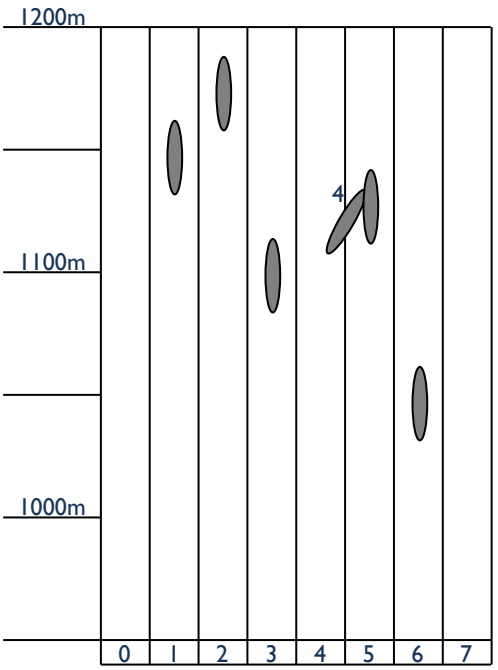
Situation:

i. 2 and 1 in Gold and Silver positions

ii. 4 or 5 for Bronze

iii. 4 fouls 5 through rudder failure

iv. 5 stopped/seriously slowed and overtaken by 3.



Actions:

A. i. Stop the race
   ii. Disqualify 4
   iii. Re-row all remaining crews

B. i. Allow race to finish
   ii. Disqualify 4
   iii. Re-row 3 and 5 for Bronze medal.

Notes:

Option A is preferred.

If this race were a heat, neither solution is satisfactory. The action(s) required would depend on the number of crews progressing to the next round and if 5 was in contention for one of these places. Crew 5's chances must be restored, after disqualifying 4, and preferably without a re-row.

This is a sensitive area since crews may argue that they have a fast finish/second 1000m and cannot be disregarded too early.

Case 2

Event: J 4-, 2000m; Race: Final; Outcome: Gold/Silver/Bronze

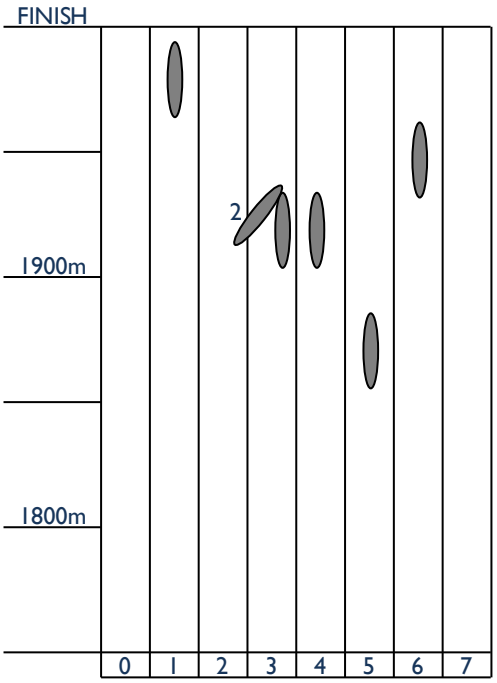
Situation:

i. 1 crossing line for Gold medal

ii. 6 is one length behind

iii. 2, 3 & 4 all one length behind 6, level and racing for Bronze medal

iv. 2 fouls 3; 3 seriously impeded.



Actions:

A. i. Allow race to finish
ii. Disqualify 2
iii. Re-row 3 and 4 for Bronze medal.

Notes:

The outcome for Gold and Silver has not been affected by the Foul.

Since the race is a Final, the fair determination is to re-row the crews that were not responsible for the foul and were in contention for the Bronze medal.

7.3. Unfair Advantage

Event: Any 2000m; Race: Semi-final; Outcome: 3 to Final

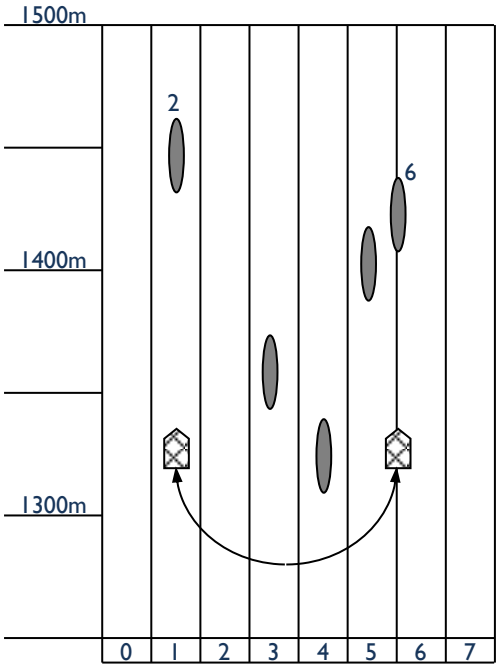
Situation:

i. Crosswind present with lane 1 calm

ii. Crews allocated lanes 2-6 by the Starter to equalise conditions

iii. 2 refuses to return to correct lane after repeated warnings

iv. Possible foul/interference between 5 & 6.



Actions:

A. i. Hazard of 5 & 6 foul/interference takes priority
ii. Stop and disqualify 2 when convenient.

B. i. Hazard of 5 & 6 foul/interference takes priority
ii. Allow the race to finish, continuing warnings to 2
iii. Assess nature of advantage and finish distances between crews
iv. If appropriate, disqualify 2 after the finish.

Notes:

Option A is preferred since the remaining crews are aware of the true position.

Monitor the impact of wind on racing throughout the race to assess the impact on each lane and crew.

7.4. Collision with Obstacle Off Course

Event: Championship 4-; Race: Final; Outcome: Gold/Silver/Bronze

Situation:

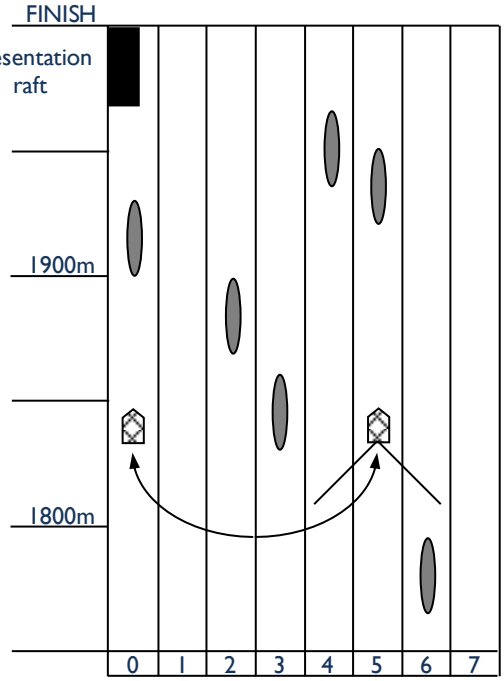
i. Possible foul/interference between 4 & 5

ii. Crew 1 in lane 0; previously warned with no response

iii. 1 is a possible medallist if crew returns to lane

iv. No advantage to 1 by racing in lane 0

v. If 1 continues in lane 0, could collide with presentation raft



Actions:

A. i. Protecting safety of 1 takes priority, then separating 4 & 5
ii. If a collision between presentation raft and 1 is certain, stop 1
iii. 6 may encounter launch wash for safety reasons or to ensure a fair chance for 4 and 5.

Notes:

Safety is the priority.

Once 1 has been stopped and is safe, it may continue to race and be placed or qualify in the normal way.

7.5. Launch Positioning

Event: W PR2 1x; Race: Final; Outcome: Gold/Silver/Bronze

Situation:

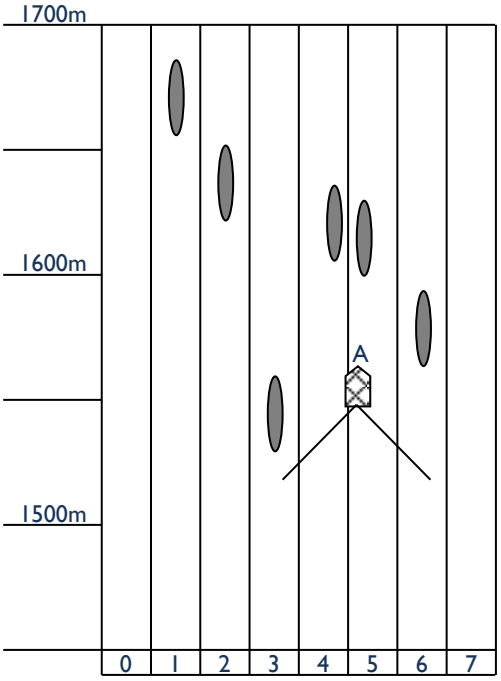
i. Crews 1, 2, 4 & 5 in contention for medals

ii. 1 and 2 steering well, separated by clear water

iii. 4 and 5 could come together in the closing stages of the race.

Actions:

A. i. Place launch in position A
ii. Cover possible interference/foul between 4 and 5
iii. Stay 'in touch' with the race without affecting 3 with launch wash



Notes:

It is important to keep up with the leading crews to enable swift action if required.

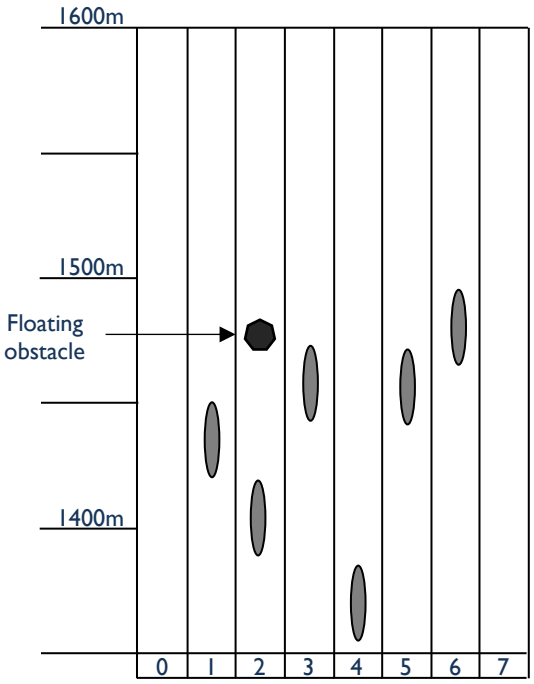
7.6. Obstacle on Course

Event: Any 2000m; Race: Semi-final; Outcome: 3 to Final

Situation:

i. Crews 1, 2, 3, 5 & 6 in contention for progression to Final

ii. Floating obstacle in lane 2



Actions:

A. i. Steer 2 around the obstacle
ii. Continue the race
iii. Assess effect of course deviation for 2 on final result; adjust finishing order or order a re-row if appropriate.

B. i. In the event that 2 hits the obstacle and is impeded, or is stopped for safety reasons:
- Stop the race
- Re-row race with all crews.

Notes:

Option 1 is preferred: crew 2's chances must be restored, preferably without a re-row.

7.7. Umpire Intervention

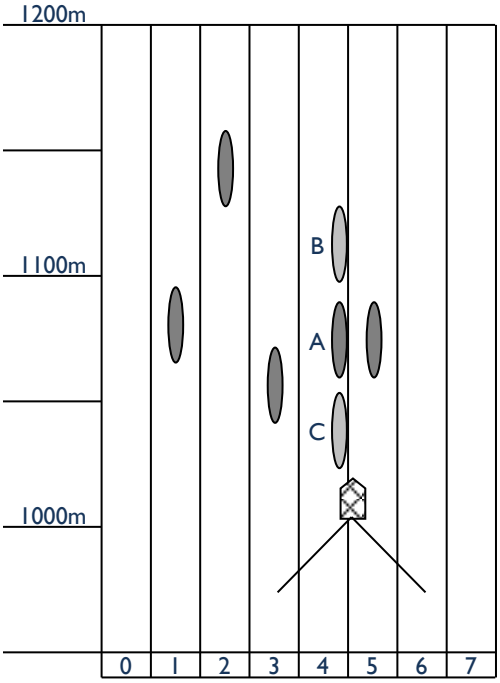
Event: Any 2000m; Race: Any; Outcome: Any

Situation:

i. 4 positioned at edge of lane 4, close to boundary with lane 5

and in either:

1. position A (level with 5), or
2. position B (ahead of 5), or
3. position C (behind 5).



Actions:

A. When 4 is in position A, warn 4 away from possible danger and stay in lane.
B. When 4 in in position B, warn 4 and be prepared to move in if the position deteriorates further.
C. No action required; 4 does not pose a disadvantage for other crews.

Notes:

A crew moves out of its lane once its blades cross over into another lane. Neutral water in multi-lane racing could be deemed to be where two crews, side by side, are each within their respective lanes but with blades close to the lane boundaries. An umpire may then name both crews to order them to "move apart."

Part 2

8. Multi-Lane Courses

This section covers specific multi-lane courses and/or competitions, providing detail at local level. It has been produced in partnership with Race Committee Chairs (RCCs), but umpires attending any competition should ensure that they read the instructions issued to officials for that specific competition as the information below is subject to change and may have been edited for simplicity.

Although Cardiff and Docklands have multi-lane courses which have been used in previous years, there are currently no competitions scheduled at these locations and these venues do not appear in this version of the Guide. If competitions return to either course, the Guide will be updated accordingly.

8.1. Dorney Lake (Eton College Rowing Centre)

Course Features

These will differ from regatta to regatta but many features such as circulation patterns both on the water and on land are becoming aligned. In addition to the main racing lake with 10 lanes (up to eight for racing), Dorney Lake has a warm up/return lake area which has access points near the boathouse/pontoons area and the Start.

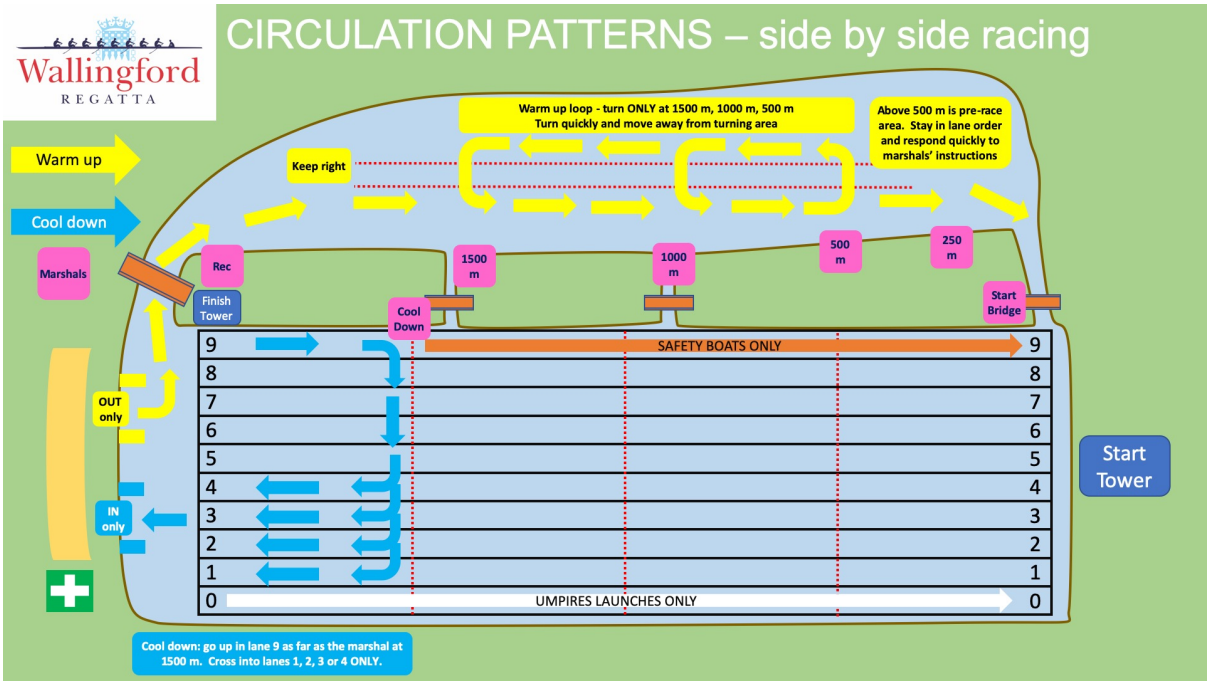
It needs to be remembered that although Dorney Lake is an Olympic and World Championship course, the course in use at domestic regattas does not have some of the standard features which are installed at courses such as Holme Pierrepont and Strathclyde Park. Facilities such as start traffic lights, boots, freeze frame photography for aligning, photo finish and the timing system are installed for World Rowing competitions but taken out again afterwards, so at a domestic regatta it is likely that the start will use a portable traffic lights system or flags, the photo finish (if used) will be by video, and timing systems will be arranged separately for each regatta.

The return lake allows crews to warm up clear of the main lake, but it does mean that crews waiting for the Start will usually be out of sight of the Starter. A Bridge Marshal and a Race Formulator can be used near to the Start to get crews together into races and push them through the bridge towards the Start pontoons and into the sight of the Starter.

All regattas use the 'swamp' for Officials' parking and Race Control is based within the Finish tower. All umpire launch changeovers take place at the Start unless there is prior agreement from the Organising Committee/Race Committee Chair.

Circulation Pattern

The diagram below illustrates the normal circulation pattern for the course.



Weather

The biggest issue affecting Dorney Lake is the effect wind can have on the outcome of fair racing. The prevailing wind is predominately a south westerly, which manifests itself by blowing from lane 9 across to lane 0. At times it can gust at speeds which will require the Race Committee to consider the best format for races and lane assignments: echelon (from right to left or vice versa) or chevron.

In general, weather 'blows' in from behind the start tower and thunder rolling around the area can present a concern.

On the Way to the Start

Umpires' launches at Dorney will normally return towards the start slowly up lane 0, as they are not of the NWSC type which can get up on the plane if they return quickly up the middle of the course.

On the Start

At the 2000m Start, the umpire's launch will normally wait at the end of the pontoon on the lane 0 side, opposite the Aligner's hut. Race sheets can be acquired from the end of the pontoon.

Where an intermediate start is used, such as 750m for the Ball Cup, the umpire's launch will normally wait at the end of the pontoon on the lane 8 side, as the lane 0 end is used for access to the pontoon from the bank.

Judge at the Start

The 2000m start pontoons are fully adjustable. The Aligner gives instructions by radio to the stakeboat operators to align the crews. For intermediate starts, the Starter and stakeboat personnel are all on one long pontoon, without adjustment for different boat classes.

8.2. The National Water Sports Centre (NWSC)

Course Features

The course is marked with yellow buoys throughout which are spaced to allow rowing in 6 lanes 12m wide. Exceptions are red buoys marking the last 100m of the course and the first 100m from each start position. At 100m from each start position there is a row of blue buoys and a white flag at each side of the course.

Lane numbers are suspended over the course at the finishing line indicating Lanes 1-6. Lane 0 on the regatta side is normally reserved for safety boats. Lane 7 is used by crews going to the start.

The course markers countdown from 2000m at the Start to 0m at the Finish. This is opposite to many other courses and can cause confusion. Care needs to be taken when using distances to identify your whereabouts or where an incident has occurred. e.g. does 'at 250m' mean 250m from the Start or 250m from the Finish? The 250m marker is towards the Finish so if the incident is at the Start end of the course it's better to say 'by the 1750m marker' or '250m from the Start' etc.

The start tower at 2000m is fixed and gives reasonable protection although the design of the windows does cause blind spots where the frames block line of sight. It has full communications equipment and a traffic light start facility.

The start tower for intermediate starts at 500m, 1000m or 1500m is "floating" and gives no weather protection. It has limited communications equipment and a flag start is used.

There are 'steering guides' behind each lane at the 2000m start. Official Warnings are indicated by hanging a red disk on the steering guide behind each lane as appropriate.

The pontoons at 2000m are individually adjustable. The stakeboats at intermediate starts are connected to one transverse wire that is adjusted on each side of the course. Fine adjustment for individual boat position is made by hand by the stakeboat personnel.

The timing huts at the intermediate start points have facilities for aligning and starting a race. Aligning is done between a vertical wire in the box and a line on a marker on the far side of the course.

There are toilet facilities at the Start and also beside the 1000m hut.

Limited protection may be given by the bank to some lanes in some crosswind conditions, and there can be a build-up of waves at the start or finish end of the course where the wind is blowing strongly along the course.

The banks are constructed to absorb boat wash waves and prevent their reflection.

Circulation Pattern

The diagrams below illustrate the normal circulation pattern for the course as prescribed at the British Rowing Championships. Note that individual regattas may apply minor variations.

It can be extremely dangerous if crews move towards the start in lanes other than Lane 7, and for crews to move towards the finish in Lane 7. A serious view must always be taken of non-compliance with the rules, particularly when deliberate.

It is important to note that the circulation pattern rules apply to the whole course even

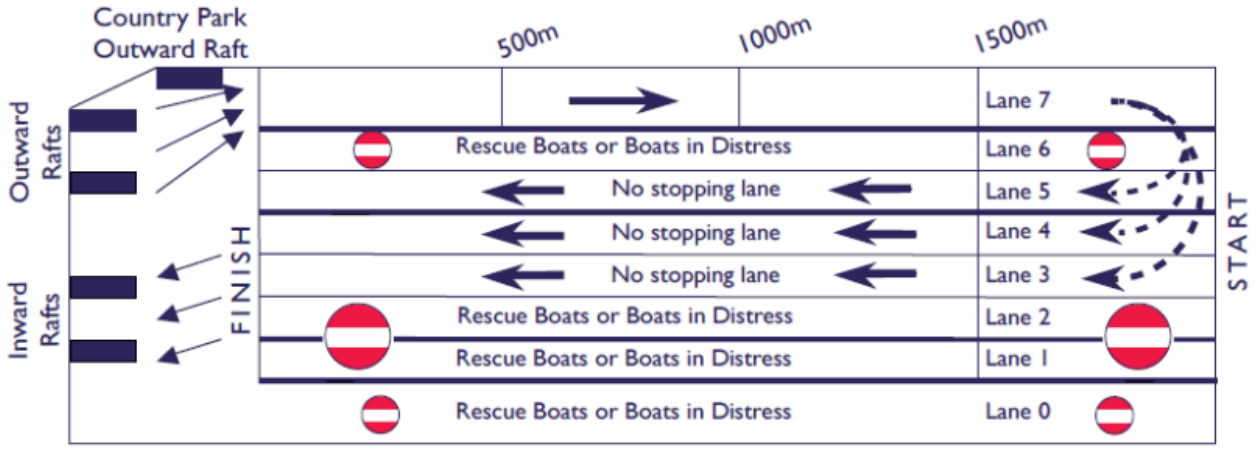
where an intermediate start is in use. Regattas should make this clear to all crews. Umpires should be alert to dangerous boat movements the area behind an intermediate start.

Motorboats should be static or moving slowly when in Lane 0 to minimise wash. High-speed movement towards the start must only be made in lane 3 or 4 (depending on the warming-up arrangements that are in force) and should go no closer than 250m towards an oncoming race before stopping and moving slowly to the side of the course.

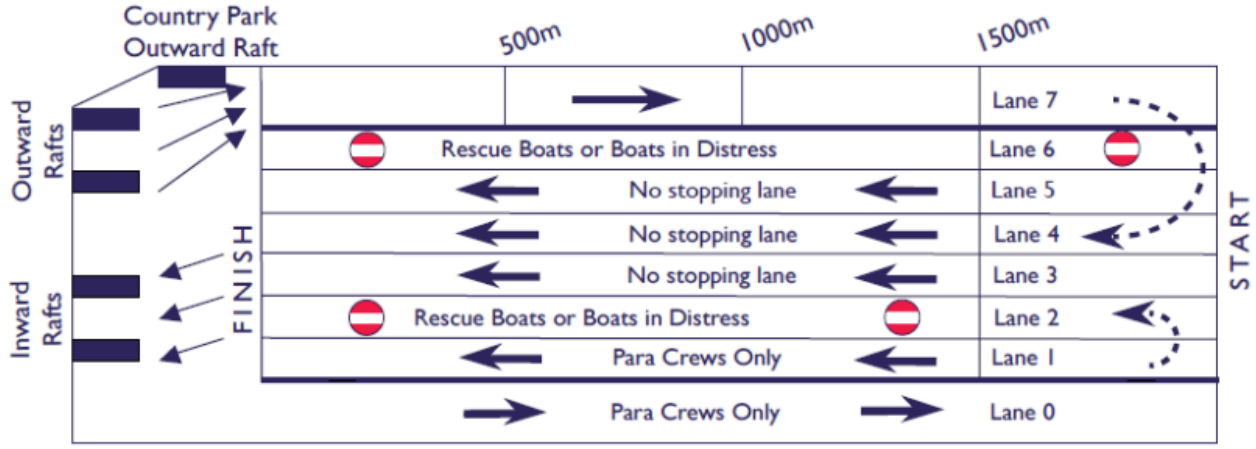
Crews waiting for a race must hold in Lane 7 for starts at 2000m. For the intermediate starts at 1500, 1000 and 500m, they should pass through and hold behind the start tower in their appropriate lane.

Boats should move to and from the staging in the pattern illustrated to avoid congestion and danger of collision. Particular care should be taken with the stages on the Country Park side and with those just below the finish on the same side of the course as the finish tower. Some regattas may forbid or restrict the use of these stages.

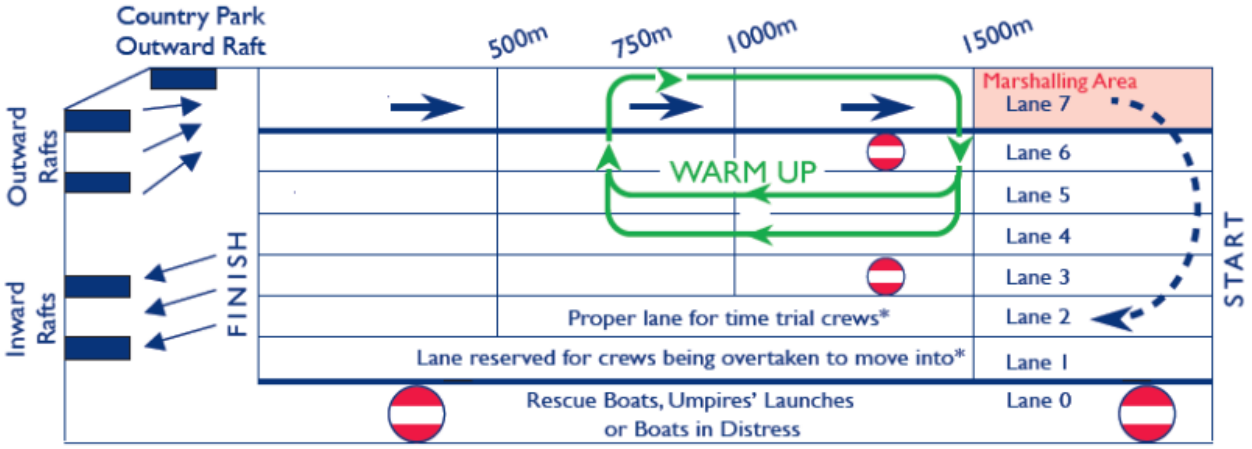
- Typical training circulation pattern:



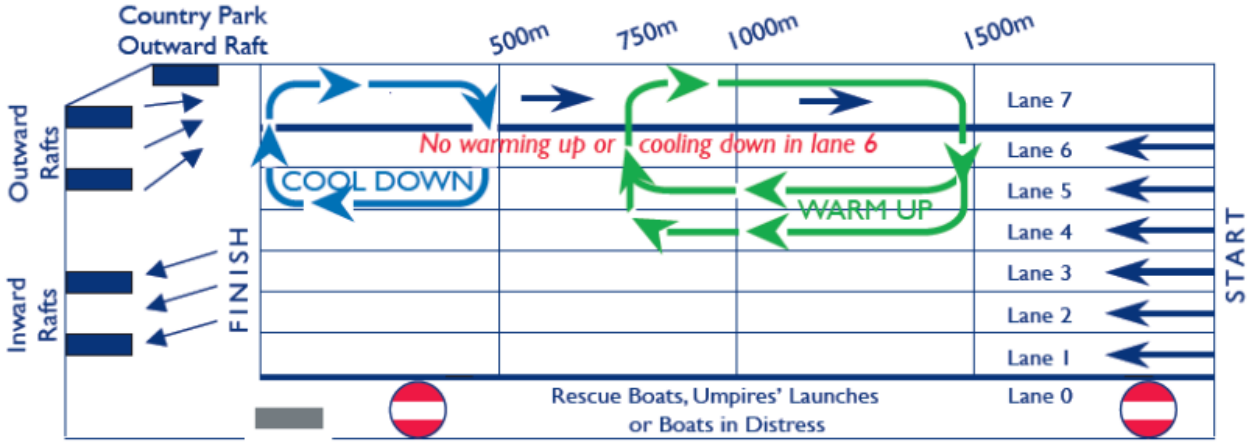
- Typical training circulation pattern with designated lanes for para-rowing crews:



- Typical time trial racing circulation pattern:



- Typical side-by-side racing circulation pattern:



Weather

The most common adverse effect is a crosswind sheltering Lanes 1 or 6. A partial crosswind can cause serious variations in wave conditions at the 2000m start, and/or at other points on the course. It is the Umpire's responsibility to assess the fairness of the conditions in each lane and to advise the starter accordingly. Wherever possible crews should be raced in lanes which have equal conditions. This frequently results in the avoidance of the use of a calm lane. If crews are moved across to equalise conditions the order of lanes from the original draw must be retained.

On the Way to the Start

On the way to the Start, the launch should move up the centre of the course at high speed to minimise wash, subject to any "suppléant" pattern (see section 3.5 Race Umpire for details).

On the Start

While waiting for the race, the Umpire's launch should be in Lane 0 (near the Aligner's hut) at the 2000m start and at the side of the floating tower at an intermediate start.

At an intermediate start position, while the start is proceeding, move the launch away and slightly forward. It should not be too close to the start line to inhibit the Umpire's view of all crews.

A programme check can be made with the Aligner at the 2000m start or the Assistant Starter at an intermediate start.

Judge at the Start

Provide primary contact with Race Control for programme changes. A printer is provided that may be used to provide programme updates, and if multiple copies are used a copy can be given to the Umpire.

Video at 2000m – set the camera (which records the traffic light start system) running for the start. Use it to confirm perceived false starts.

At the 2000m start adjustments can be made on the individual pontoons. Fine tuning can be done by hand by the operators on the pontoons.

At the intermediate starts all stakeboats are attached to the same line. Fairly major adjustments may be required in the hands of the stakeboat personnel.

8.3. Peterborough

Course Features

The course is marked with (generally) yellow buoys which are spaced to allow rowing in four lanes. Lanes are numbered 1 to 4 from left to right when at the Start. Lane 5, located on the side away from the boathouse, is used for crews going to the Start.

Starts at 1000m are conducted from a position on the end of the course where there is limited protection from the weather. Starts at intermediate positions are conducted from the lane 1 side of the course, where there is limited protection from the weather.

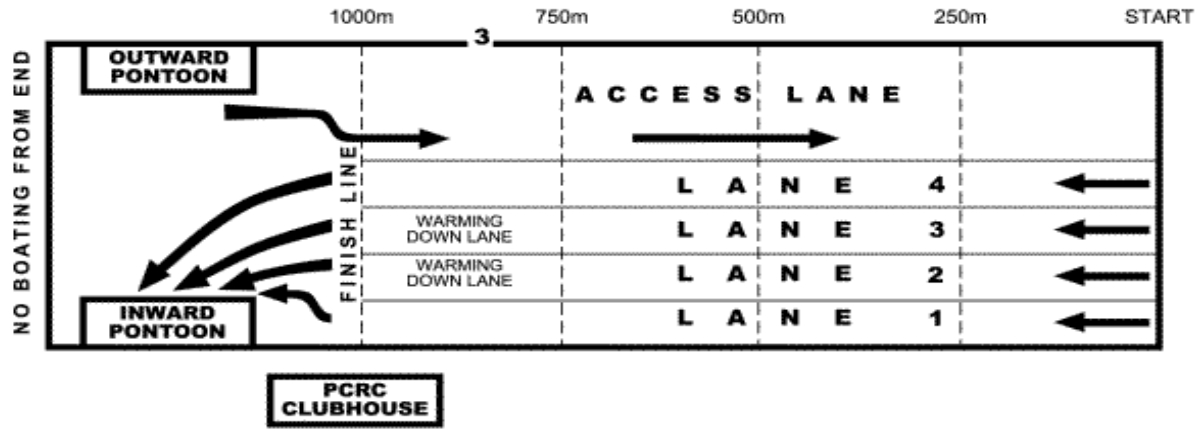
The stakeboats at 1000m are fixed and the stakeboat operators can make limited adjustments. Alignment for different boat lengths is done using a set of sighting marks that are pre-set at the average length for different boat types. The stakeboats at intermediate starts are fixed to the bottom of the course. Fine adjustment for individual boat position is made by hand by the stakeboat operators moving the stern of the boat forwards or backwards.

Limited protection may be given by the bank to some lanes in crosswind conditions, and there can be a build-up of waves at the start and/or finish end of the course where the wind is blowing strongly along the course.

The banks are constructed to absorb waves from boat wash and prevent their reflection.

Circulation Pattern

The diagram below illustrates the normal circulation pattern for the course.



It can be dangerous if crews proceed towards the Start in lanes other than lane 5, and for crews to proceed towards the finish in lane 5.

Crews should proceed towards the Start in lane 5 and must hold in lane 5 for starts at the 1000m Start. For intermediate starts, crews should pass beyond the Start and marshal behind the Start line in their appropriate lane.

Weather

The prevailing weather is a tailwind down the course.

On the Way to the Start

On the way to the start, the Umpires' launches should proceed in lane 1 as far as possible and then move at right angles to the racing lanes into lane 5 to avoid oncoming races.

On the Start

While waiting for the race, the umpire's launch should be in lane 5 at the 1000m start and in lane 2 or 3 behind the start line for an intermediate start.

Race sheets can be acquired and programme checks made at the Finish hut or, if necessary, race details can be obtained from the Starter.

Judge at the Start

Alignment of crews is done using markers on either side of the course, positioned for each boat class, to allow fine tuning of crews attached 'stern on' to the line of stakeboats. The aligner selects the appropriate set of aligning markers and gives instructions to the stakeboat operators to align the crews.

8.4. Strathclyde Park

Course Features

Strathclyde Park is an eight lane, 2000m course located 15 miles south-east of Glasgow.

The start tower at 0m is fixed and gives reasonable protection from weather. The start tower for intermediate starts at 500m, 1000m or 1500m is 'floating' and gives very little weather protection. The start tower at 0m has full communications equipment; those at the intermediate starts have limited communications equipment.

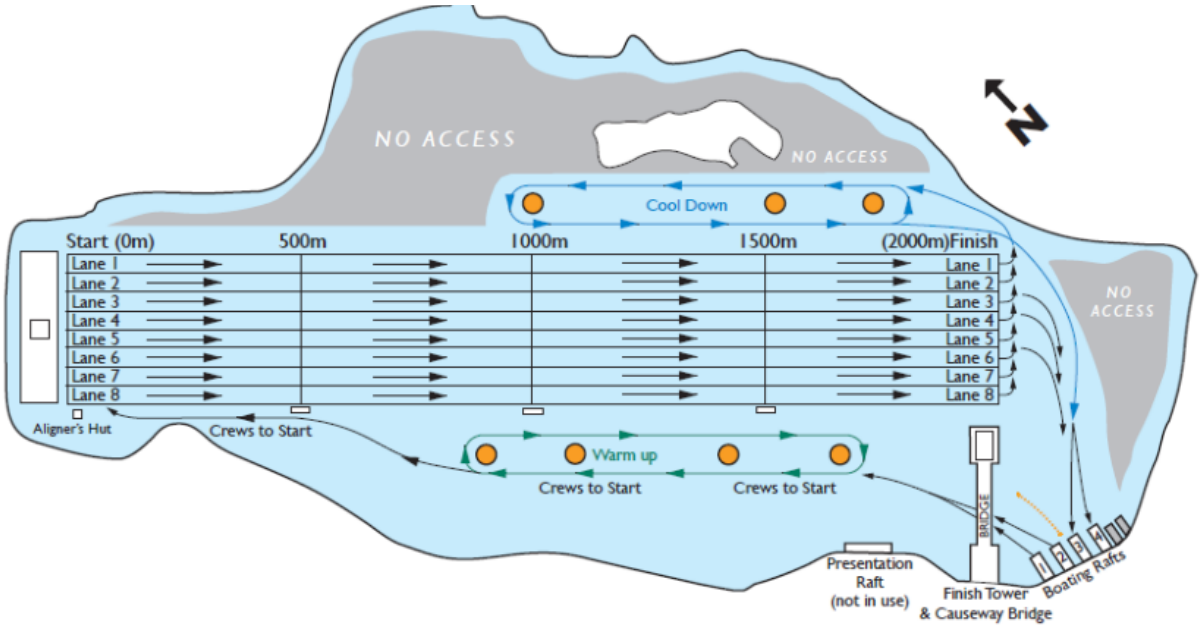
The pontoons at 0m are individually adjustable with no limits on accuracy. The stakeboats at intermediate starts are connected to one transverse wire which is adjusted on each side of the course. Fine adjustment for individual boat position is made by hand by the stakeboat operators.

The timing huts at the intermediate start points have facilities for aligning and starting a race. Aligning is achieved using a vertical wire in the hut and a line on a marker on the far side of the course.

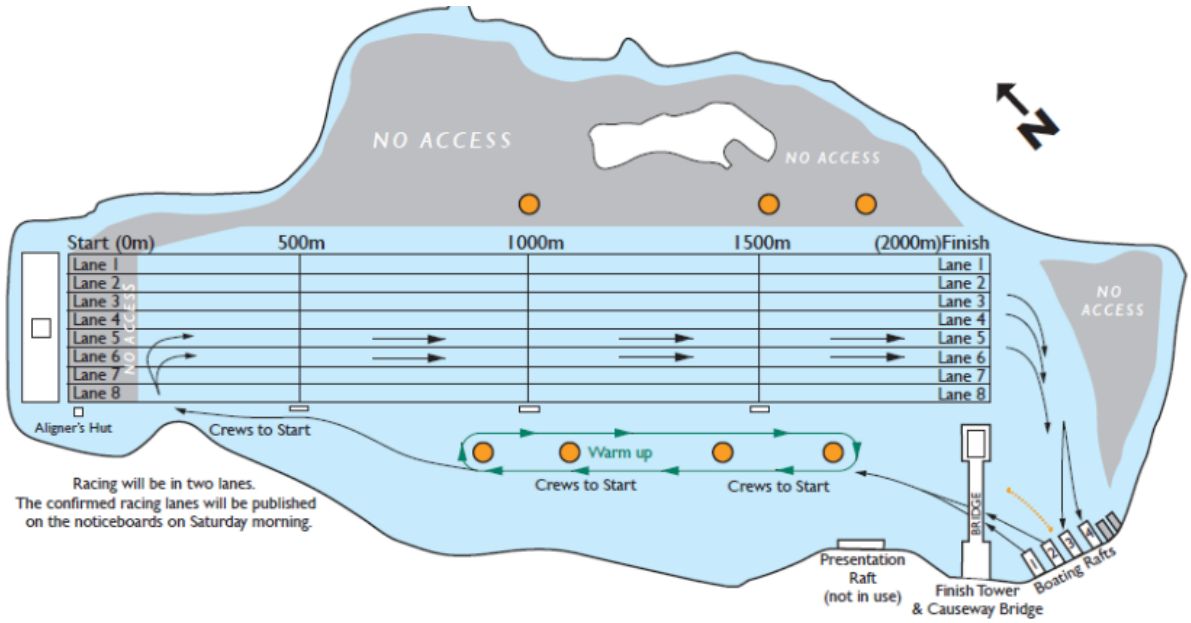
All eight lanes have a traffic light start system, as do the intermediate starts. False start indicators for lanes 1-8 at the 0m start are orange flashing lights on top of lane markers, operated by the Starter. At intermediate starts, a cone is used to indicate a false start.

Circulation Pattern

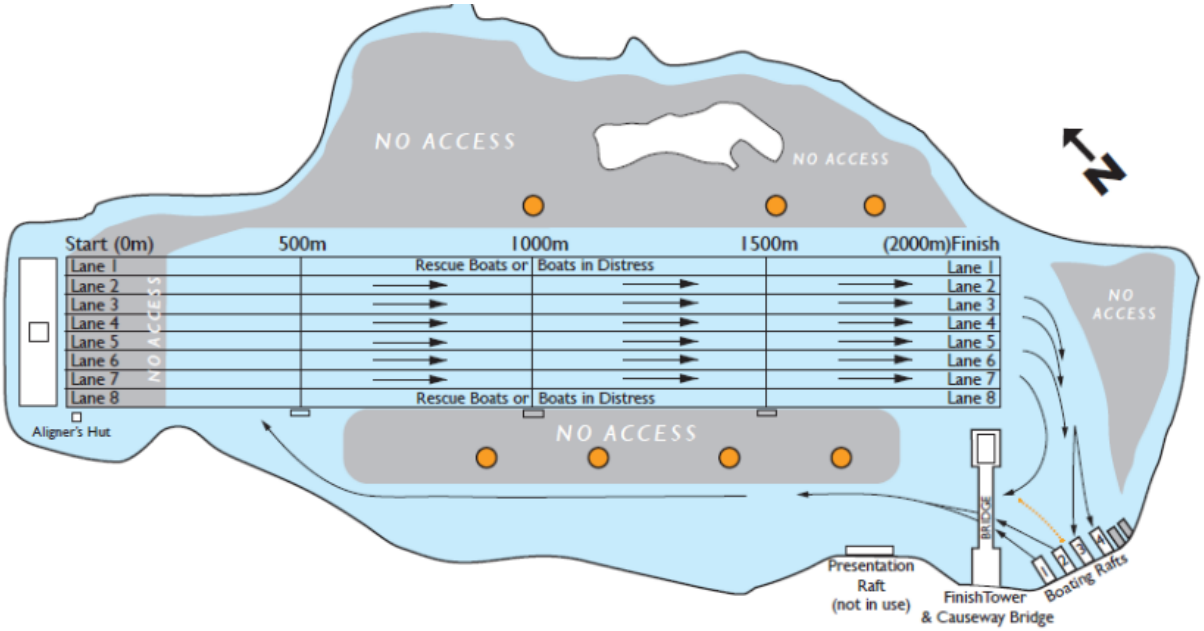
The diagram below illustrates the normal circulation pattern for the course during racing.



The diagram below illustrates the normal circulation pattern for time trials.



The diagram below illustrates the normal circulation pattern for training.



Weather

The prevailing winds are cross-tail and usually affect all lanes equally. The 0m start area is quite sheltered, whereas intermediate starts are more exposed to crosswinds which makes attachment and alignment more difficult for crews.

On the Way to the Start

On the way to the Start, the launch should move up the centre of the course at high speed to minimise wash, slowing before turning off the course, subject to any "suppléant" pattern

(see page 24 for more details).

On the Start

While waiting for the race, the umpire's launch should be beside the Aligner's hut at the 0m start and at the side of the floating tower at any of the intermediate starts.

At an intermediate start position, while the Start is proceeding, the launch should be moved away and slightly forward of the start, without blocking the view of the Judge at the Start and Umpire.

For starts at 0m, programmes and race information can be checked via a computer system in the start tower or via radio communication with Race Control. For intermediate starts, updates are given over the radio by Race Control.

At both the 0m and intermediate starts, the Starter initiates the timing system when they press the green start button.

Judge at the Start

The Aligner's hut at 0m is linked to the bank by a pontoon and is equipped with red and white lights to indicate alignment. There is a radio link to the start tower and a separate channel to communicate with stakeboat operators. Video recording equipment (with an operator) is provided to review false starts. Adjustments for alignment can be made on the individual pontoons. Fine tuning can be done in the hands of the operators on the pontoons.

The Aligner's hut at intermediate starts can only be accessed by boat. There are no red and white lights to indicate alignment and flags should be used. There is a radio link to the start tower and a separate channel to communicate with stakeboat operators. No video equipment is provided at intermediate starts. At the intermediate starts all stakeboats are attached to the same line. This only allows for minor adjustments in the hands of the operators on the stakeboats.

8.5. Tees

Course Features

The course runs east to west from the Tees Barrage finishing just outside the River Tees Watersports Centre. The 850m, four-lane, course is numbered 1 to 4 from south to north with lane one on the left-hand side for the Starter and race umpires. Crews boat from the north side of the river, cross the course and then use the south edge of the river to get to the start.

The start area is prone to crosswinds which can cause difficulties for crews. Stakeboats are not used to give maximum flexibility to the start team to position crews appropriately. The centre of each lane is marked with a larger buoy with the lane number on it.

Circulation Pattern

The diagram below illustrates the normal circulation pattern for the course.

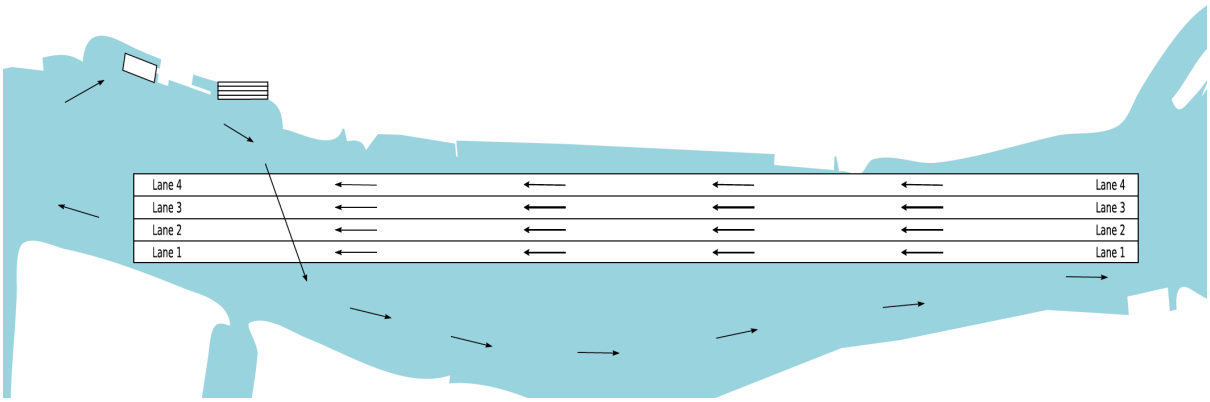
Crews boat from the steps approximately 150 metres before the finish line with bows pointing towards the start end of the course. Shortly after pushing off crews must cross the racing lanes to reach the south side of the river. This crossing is marshal controlled but race umpires must be vigilant for any stray crews that fail to cross the course in a timely manner.

After crossing the course crews proceed up the south edge of the course. The access lane narrows near the start and the starter should be aware of crews arriving in that area when a start procedure is in progress.

The pre-start area is bounded by the Tees Barrage, marked by a row of booms. The area can become crowded if races are delayed and in this situation the marshals will try to keep individual races grouped together to ease attachment and alignment.

After the finish crews paddle on a short distance before turning and returning to the pontoons adjacent to the finish line.

Umpire and safety boats embark/disembark from the slipway positioned between the pontoons and steps.



Weather

The course is susceptible to cross and headwinds. During periods of bad weather, there are often heavy showers/downpours and sometimes thunderstorms. Proximity to the sea is a factor in the weather experienced.

On the Way to the Start

On the way to the start, the Umpires' launch should proceed in the south side access lane just off the course limits. Speed should be kept to a minimum especially when races are approaching. The banks tend to reflect the wash so be mindful of this and slow down well in advance.

On the Start

While waiting for the race the umpire should come through into the pre-start area and position itself with the race crews between the launch and the start. Race details are obtained from the Starter. In adverse wind conditions the Race Umpire may usefully assist bringing crews onto the start and checking lane alignment from behind.

Judge at the Start

The Starter acts as Aligner and Judge at the Start. Crews are instructed via the PA system to move their boats in the appropriate direction.

Starter

The Start Umpire team is based in a large tent on the south side of the river with PA system to aid communication with crews. One umpire will act as Starter and the other will act as Start Zone Supervisor.