

International WASZP Class Association

Race Management Guide



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INTRODUCTION

WASZP is the most popular one-design foiling boat in the world. The fleet is truly global and consists of a wide spread of sailors in terms of demographic and ability. WASZP events are separated into three tiers: the only Tier 1 event is the WASZP Games; Tier 2 includes continental championships, and every other event is allocated Tier 3.

The WASZP is sailed by a wide range of sailor. Young and old; big and small; Olympians and club sailors. The inclusivity of the class is one of its biggest strengths, so it is important to ensure every WASZP event appeals to all sailors regardless of their position on the scoreboard. WASZP events should always deliver high-quality racing, inclusive socials and learning opportunities.

This document focusses on the delivery of the high-quality racing.

World Sailing Policy

Unless otherwise stated in this document, race officers should consider the World Sailing policy on fleet race management found here.

Communication with Sailors

Officials should always be transparent with their decision making and flexible to the needs of the class. Clear, open dialogue with sailors and coaches is always welcomed.

Daily briefings are a helpful way of setting out the expectations for the day and other methods of communication, such as a Whatsapp group, are useful to keep the race team connected with the competitors.

The staff at WASZP are always on hand to offer support and advice to Race Officers and officials. Contact class@waszp.com any time.



CHAMPIONSHIP RACING

From a race management perspective, the fact that the boats are foiling makes little difference to the operations of a race committee. Below are some typical rules of thumb to consider when organising WASZP racing.

Schedule of Races:

Class surveys suggest around half of the fleet prefer three races per day and around half prefer four. Generally, aim to schedule four races per day with a maximum of five on any given day.

Should conditions only allow three races in one day, there will be few complaints. If the races are falling behind schedule, Race Officers should only schedule a 5 race day if (1) the forecast for the following days looks poor for foiling racing and/or there is a risk that future races will be lost; or (2) the conditions are as close to perfect as you could imagine (If it's not warm with 12-15 knots of consistent wind, most sailors have probably had enough after 4 races!). There is certainly no need to schedule 5 races if it is low-riding, marginal foiling or particularly windy.

Launching

Safe and sheltered launching is crucial for the WASZP class. A wide slipway or sheltered beach with plenty of space to sail out from is ideal. Waves at the launching area make launching and recovery considerably more difficult in comparison to non-foiling classes.

Each boat will take approximately 90 seconds to launch. If a 40-boat fleet is launching single file one after the other, be prepared for launching to take an hour; if two boats can launch at once, expect 30 minutes; and if four boats can launch at once, it may only take 15 minutes to get everybody onto the water. A WASZP isn't a relaxing place to wait around for long periods, so minimising the waiting time for the first boats that launch is important.

Foiling vs Lowriding

The inability for some or all boats to foil does not automatically make a race unfair.

A common discussion a Race Officer will hear is whether racing should go ahead if it's not foiling conditions. People sail the WASZP because they want to go foiling, so the Race Officer should always aim to run racing in foiling conditions and may delay racing if there is a good chance the conditions will improve. If the forecast is marginal, consider changing the schedule to give the best chance of foiling racing. That could mean changing start times to better align with the best forecast or could mean weighting more races to the day with the best conditions (if you are running a weekend where it looks as though Saturday is foiling and Sunday is particularly light, this may be an example of a time where the Race Officer schedules 5 races on the Saturday and 3 on the Sunday).

How windy does it need to be to foil? It depends. Some of the lightest and most experienced sailors get foiling in 7 knots whereas some of the bigger or less experienced sailors might need 9 knots. The WASZP fleet has a wide range of weights (and experience) in the fleet so putting parameters on 'foiling conditions' is troublesome and attempting to build a rule around it will never yield a fair result.

If the conditions are simply light and there is no reason to believe postponing racing will offer any better chance of foiling, the fleet should race. Some low-riding sailing is better than no sailing at all. No more than 3 races should be sailed in one day in low-riding conditions. After a couple of hours on



the water in light wind, morale quickly takes a slump and an extra hour at the bar may prove more fulfilling than squeezing an extra race on the water.

If a race starts in foiling conditions and the wind dies during the race so that some or all sailors are low-riding, the race should continue to the finish. In this scenario, a Race Officer should remove the foiling element from their decision making and should apply the same principles as they would to traditional classes when considering whether a race should be abandoned or not in the light winds.

Wind limits

The lower wind limit for the class is 6 knots (with reasonable consistency across the course). The upper limit varies, with a limit of around 25 knots average on perfectly flat water. Sea state is a huge factor with the WASZP, so the sensible upper limit will decrease as the sea state increases (25 knots on flat water is probably more manageable than 18 knots in steep chop).

Fleet size

The maximum number of boats on one championship start is 90 (providing the venue can accommodate a start line and course length big enough). Where there are more than 90 boats, the fleet should be split.

If the fleet is split, consideration needs to be given to how each flight will achieve the full schedule of races. Two courses operating in parallel is the only perfect solution, but there may be significant cost and resource issues to this. Alternating flights on one course is possible and has been done in the past. However, this puts pressure on the schedule and can become complicated if one flight completes more races than another in a day, so it is important to consider whether there is enough time in the day for this (especially in afternoon thermal venues). If everything runs perfectly with no delays, racing can be completed within an allotted time of 45mins per race (Orange flag, 5min sequence, 20min leader, 10min finish window, 5 min break, repeat).

Course Configuration

There are diagrams for course configuration options at the bottom of this section.

Championship races use a windward/leeward course. There are variations to consider around the use of traditional single windward and leeward marks or windward and leeward gates (or a combination of the two). A windward gate creates a more open downwind leg from a tactical point of view but needs to be set more precisely than a single mark with spreader. A leeward gate offers more tactical choices for the upwind legs but makes lap counting more difficult and the finish potentially more confusing for newcomers to the Grand Prix Finish system. The choice is often dictated by the resource available and experience of the race team and RIB drivers.

For large fleets, two sets of windward marks may be an effective way of ensuring a long enough first leg whilst maintaining the target time and preventing lots of sailors from being timed out. At the 2021 European Championships (where most races were sailed in 12-18 knots), the first windward leg was 2000m and the second windward leg was 1100m – one long and one short lap. The length of the first leg was required to avoid over congestion at the first mark, but two laps of that length would have made the target time difficult to achieve. It would have also meant that many sailors that rounded the leeward gate for the first time shortly before the lead boat rounded for the second time (to finish) would have been timed out, whereas the short second lap allowed them to finish legitimately.



A final consideration for course for domestic events and non-championship racing is the NASCAR course. This course is great for fleets with lower ability sailors as it maximises foiling time with reaching legs and only one gybe and one tack per lap. It is particularly good in marginal conditions where foiling upwind and downwind could be difficult for less skilled sailors.

There is no fixed rule on configuration. Whatever variation, the most important aspects are always a square line, square course axis and accurate lap counting.

Changing the Course

Once a race has started, there is very little opportunity to change the course because the fleet spreads out so quickly that the leaders soon overtake the tailenders and there are boats in every position on the course. Course changes should therefore be avoided unless the Race Officer is absolutely certain that they have enough time to make the change without affecting the fairness of the racing.

Target Times and Course Length

The target time for the lead boat in a championship race is approximately 20 minutes. This is long enough to offer tactical choices and passing opportunities whilst short enough to be achievable for less experienced sailors to complete. Beyond 20 minutes, the fleet becomes spread out so place changes are less frequent and the race becomes more of a procession.

In low-riding conditions with a large fleet, a 20-minute target time may be difficult to achieve, but the Race Officer should aim to make the race as close to this as possible without overcrowding at the marks (the fleet will be less spread out in low-riding conditions, so the mark roundings will be busy). A course as short as 500m (0.3NM) may be appropriate.

In foiling conditions, the overall course length should be between 5km (2.7NM) and 6.5km (3.5NM) depending on wind speed and sea state and therefore VMG of the boats. For example, 2 laps of a 1500m (0.8NM) leg length = 6km (3.2NM) total. Leg length is dictated by the number of boats. In smaller fleets, a short course of 900-1100m (0.5-0.6NM) with three laps could be appropriate. In a larger fleet of 40+ boats, two laps of a longer course (perhaps 1500m or 0.8NM) is better to avoid congestion. With a competitive fleet of 60+ boats, consider two windward gates (see course 2).

More than three laps get complicated with the lap counting (see Grand Prix Finish below), so if boats are achieving 4 laps in the target time, consider lengthening the course to achieve the target time in 3 laps.

Choosing the number of laps

The more laps sailed, the more complicated the scoring becomes with the Grand Prix Finish. Set the course length to give you three laps or fewer. If the venue is small and the fleet is small, more laps is manageable, but as the fleet grows, Race Officers should be aware that the scoring gets considerably more difficult. In a Tier 1 or 2 event, two laps is preferable to avoid scoring mistakes.

If the course needs to be shortened and the course uses a leeward gate (or if the course needs to be shortened at a windward gate), the race committee must station a boat with a view along the new finishing line between the gate marks to take the finish positions. Using a video camera is advised and a second recording boat is always helpful. See RRS 32.2(c). In this scenario, the committee boat, or a RIB stationed to record finish positions, displays the S flag just before the lead boat sails through the



gate. This rule shouldn't be changed. Although it is more work for the race committee to station a recording boat on the new line, the result will ultimately be fairer for the sailors. Changing a gate to a single mark when shortening the course could disadvantage sailors that have positioned themselves early for the other gate mark and can lead to further complications with the Grand Prix Finish. Also keep in mind that this is only likely to happen in light winds, so RIBs are unlikely to be engaged in safety duties. Be sure to explain this procedure in the briefing as many sailors are not aware of this rule. The key message to sailors is to continue to sail the course, always passing through the gate. If the S flag is displayed, they must pass through the gate before they stop.

Time Limit and Finishing Window

Set a race time limit (RRS35) of 40 minutes and a mark 1 time limit of 15 minutes. In foiling conditions, these limits should never be threatened but in light winds with a big fleet, they may become important.

Set a finishing window of 10-15 minutes. Be prepared to adjust this during the event if you feel appropriate.

The Start

The starting sequence for championship racing is 5,4,1,0 as per RRS 26. It is down to the Race Officer to decide the preparatory signal, but generally the U flag is a good option, moving to black after a general recall. The P flag should be avoided in big fleets, firstly to discourage boats from being over the line and secondly, because it is potentially dangerous for a boat to try to sail downwind through a busy start line to get to the pre-start side. I and Z flags should never be used.

Set a line length of approximately 7m per boat in moderate conditions. If low-riding, the line could be as short as 5m per boat and in windy conditions, consider lengthening the line to 8-9m per boat to give sailors a little more runway to play with.

Always aim to set a square line. In foiling conditions, boats will tend to line up a considerable distance above the layline for the starboard end before reaching in at speed along the line to find a gap in the final seconds, so expect to find bunching at the starboard end for most starts. Race Officers should avoid temptation to add pin bias to spread the fleet. Pin bias encourages some boats to start on port, which results in the potentially dangerous situation where boats on opposite tacks in a busy area come together with closing speeds over 30 knots.

Have your fastest RIB stationed off the port end ready to recall the fleet in the event of a general recall. The chances of sailors hearing two sound signals or seeing the flag whilst travelling at speed is slim. If your RIBs are slow, position the recall boat part way up the first leg to get a head start.

Grand Prix finish

Set the finishing line at a slight angle, with mark 2p to the right as you look upwind from the committee boat. This offers a nicer angle to sailors that need to gybe at the mark.

The WASZP class uses a Grand Prix finish system. This system makes the racing inclusive to less experienced sailors and reduces the amount of time waiting between races. The system ranks sailors by the number of laps they have completed and their finishing order compared to those that have completed the same number of laps. The lead boat might complete three laps whilst an intermediate sailor might complete two and a beginner might complete one, but all sailors will receive a score and



not a DNF. Accurate lap counting is crucial to the success of the system and the avoidance of scoring enquiries and mistakes on results, so a team of sharp volunteers is useful! A video camera is advised. Necessary equipment includes two dictaphones (or two smartphones with voice recording and sufficient battery life) and two weatherproof clipboards with scoresheets and pens.

Two recorders should record the number of every boat that passes the leeward mark(s) every time it passes i.e. if a fleet of 30 boats all complete three laps, you would have a list of 90 numbers. In larger fleets with a leeward gate, each recorder prioritises a different leeward mark but must ensure they regularly record numbers going round the opposite mark as well as their own to maintain reference points between the two recordings. One person should sit beside each recorder and write down the numbers the recorder is saying. This makes sorting results faster and acts as an insurance policy if the dictaphone runs out of battery or becomes waterlogged. It may be wise to have the recorders on different vessels with different vantage points in case the finish line is busy. Another volunteer should keep a close eye on the lead boat(s) so the race committee is prepared when that boat approaches the finish line. The boats will become mixed so it may be unclear who is winning unless somebody consistently tracks the leaders. RIBs around the course can help with this and feed back via VHF.

When the lead boat is approaching the line, the blue flag is displayed to indicate the leader is about to *finish*. If the course is shortened using course 4, the S flag and the blue flag are displayed at this point. If the course is shortened at a gate, only the S flag is displayed at this point and the line between the two gate marks becomes the finishing line (see RRS 32.2(c) and 'Choosing the number of laps' above). The race winner should be given a loud, long sound signal to make sailors aware that the first boat has *sailed the course* and *finished*. A note should be made of the winner on all recordings. If writing on paper, it is useful to start a new column or sheet at this point. When the finishing window elapses, recorders stop recording.

To correct the results based on lap counts, the list of numbers needs to be split. List 1 is the list of every boat that crossed the finishing line after the first boat crossed until the end of the finishing window. List 2 is the list of every boat that passed the leeward mark(s) before that. With a few colours of highlighter pens at the ready, one person reads out the sail numbers on List 1 and another checks the number of times that sail number appears on List 2. The number of laps that boat has completed is the number of times it appears on all lists. If the number does not appear on List 2 but appears on List 1, that boat completed one lap. If a boat appears on List 2 but not on List 1 (perhaps they had a breakage or stopped early), they score ahead of every boat that completed the same number of laps and behind every boat that completed more laps. If there is more than one boat in this scenario, they are scored against each other in their relative positions the last time they appear on List 2. If a boat appears twice on List 1, they have sailed an extra lap unnecessarily so only use the first time they appear on the list. If a number does not appear on either list, that boat did not complete one lap so did not finish (or may not have started). Re-write the list and you have your results. Keep paper and electronic records to check any scoring enquiries.

There is an example list with explanation at the bottom of this section.

Sample wording for sailing instructions:

1. GRAND PRIX FINISH

1.1 Unless shortened in accordance with RRS 32.2, the finishing line is between the staff displaying a blue flag on the signal vessel and the course side of mark 2p.



1.2 When the leading boat completes the course and finishes, the Race Committee signal boat will immediately display a blue flag with a sound signal. The blue flag will be removed at the end of the finishing window time limit.

All boats that:

- a) have completed a lap before the blue flag is displayed, but then fail to finish while it is displayed, or
- b) cross the finishing line while the blue flag is displayed
 shall be deemed to have finished irrespective of the number of laps completed. Their positions in the
 race will be based on the order when they either completed their last lap or finished, with those having
 completed more laps finishing ahead of those with fewer laps. This changes RRS 28.1 and A4
- 1.3 If a boat is shown IC flag Whiskey by an official vessel, it shall return to the starting area. That boat will be scored in its last known position. This changes RRS 28.1, A5.1 and A5.2.
- 1.4 [DP] After crossing the finishing line, competitors shall continue to sail at least 200m before stopping to clear the finishing line.

Whiskey Finish

Alongside the Grand Prix finish, the Race Officer may choose to use the Whiskey finish (this needs to be reflected in the sailing instructions). In this scenario, the Race Officer can finish boats on the course and award them their last-known position. This can help to reduce waiting time between races.

This practice will not be carried out at Tier 1 or 2 WASZP events but may be helpful at domestic events.

A situation where this may be appropriate is when a boat rounds the leeward mark/gate just ahead of the lead boat coming in to finish. If there is a big gap to the next boat in front, it may be sensible to finish them by a RIB displaying the W flag on the upwind, rather than waiting for them to sail the whole lap, especially if there is a risk they will not complete the lap within the finishing window. There is no point in showing the W flag to a boat on a downwind leg.



Grand Prix Finish Example:

FINISH FORM

Race number	 Fleet		Da	Date		
1	-			01/07/2021		
Race area	 Time of first boat		End of finishing window			
-	12:23					
2106	FINISH		1	<mark>2106</mark>		
2798			2	3001		
<mark>3001</mark>			3	<mark>2798</mark>		
(<mark>2511</mark>)	(<mark>2106</mark>)		4	<mark>2469</mark>		
<mark>2469</mark>	<mark>3001</mark>		5	<mark>2445</mark>		
<mark>2445</mark>	(<mark>2186</mark>)		6	<mark>2314</mark>		
2688	 2798		7	<mark>2096</mark>		
2096	 <mark>2469</mark>		8	<mark>2864</mark>		
<mark>2314</mark>	<mark>2445</mark>		9	<mark>2275</mark>		
<mark>2275</mark>	<mark>2314</mark>		10	<mark>2554</mark>		
<mark>2864</mark>	<mark>2096</mark>		11	<mark>2511</mark>		
<mark>2554</mark>	<mark>2864</mark>		12	2916		
<mark>2117</mark>	22 75		13	<mark>2228</mark>		
2228	<mark>2554</mark>		14	<u>3102</u>		
2916	2916		15	3118		
(<mark>2106</mark>)	2228		16	2117		
27 98	3102		17	2994		
<mark>3001</mark>	3118		18	2688		
2511	211 7		19	<mark>2186</mark>		
<mark>2469</mark>	2994		20	2666 (DNF)		
<mark>2445</mark>						
<mark>2096</mark>						
<mark>2314</mark>						
3102		J				
<mark>3118</mark>						
22 <i>7-5</i>						
2864						
2554						
2994				(0) 1010 101 101 101 101 101 101 101 101		
2117						



Above is an example of a finish list for a WASZP race. In this example, the fleet is small, so everything fits on one sheet. With a larger fleet, multiple sheets may be needed.

Key facts:

- 20 boats started this race
- The course is 3 laps
- Sail numbers in the first column are the numbers counted around the leeward gate. This is 'l ist 2'
- Sail numbers under "FINISH" are the numbers that crossed the finish line during the finishing window. This is 'List 1'
- The sail numbers in the red box to the right are the final rankings of the race

On the water:

- The recorder wrote down every number passing the leeward gate
- When the lead boat was approaching the finish, the recorder started a new column and wrote down the order of boats that crossed the line during the finishing window. Making it clear which boat crossed the finishing line first is important.

Sorting the results:

Note: It is helpful to have a different colour highlighter for each lap and at least two people working on the results of a single race. Photocopy the sheets before you begin so that you have a backup in case you make a mistake.

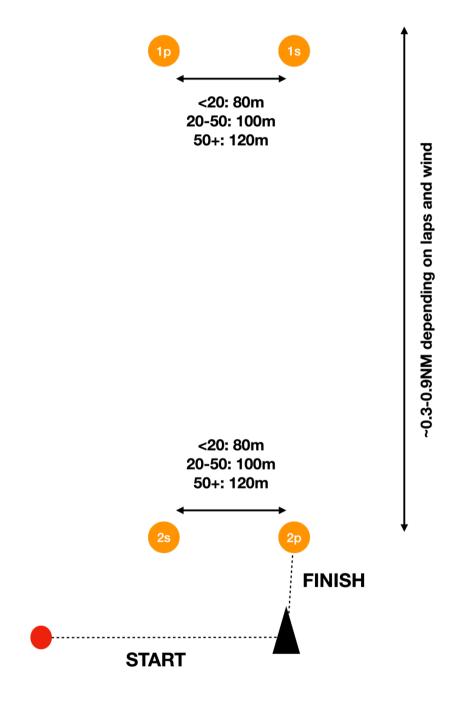
- Start at List 1 the numbers across the finish line. 2106 is the winner. The red circles show 2106 appears a total of three times, so they sailed three laps. 2106 is highlighted in yellow. Repeat this process going down the list, highlighting the different number of laps in different colours.
- 2186 the third boat to cross the finish line does not appear on List 2. It appears once in total. Therefore, despite crossing the line in third, 2186 only sailed one lap. 2186 is highlighted in pink.
- 2916 appears twice in total. Therefore 2916 sailed two laps. 2916 is highlighted in green.
- After all numbers in List 1 are highlighted, check for unhighlighted numbers in List 2. 2511 and 2688 are the examples here.
- 2511 appears twice in total, so sailed two laps but failed to cross the finishing line within the finishing window. 2511 is highlighted in blue. Notice that 2511 completed two laps before any of the numbers highlighted in green completed two laps, so is ranked ahead of the green numbers.
- 2688 appears once in total, so sailed one lap but failed to cross the finishing line within the finishing window. 2688 is highlighted in dark green. Notice that 2688 completed one lap before 2186 completed one lap so is ranked ahead of 2186.
- 2666 started the race but does not appear on List 1 or List 2. Therefore, 2666 failed to complete one lap and scores a DNF.
- Re-write the list in the order of the boats that completed three laps, those that completed two laps, those that completed one lap and those that scored letters (DNC, DNS, DNF, OCS, UFD, BFD, RET, NSC, DSQ, DNE).



Course 1:

This course offers the maximum tactical options to sailors and is the preferred course for most WASZP events.

As there is a leeward gate, at least one dedicated lap-counting RIB is required during racing alongside counting from the committee boat.



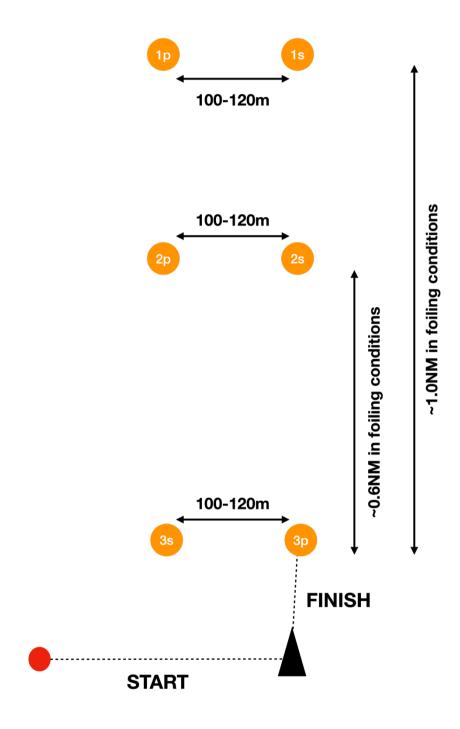
```
1 lap = START - 1p/1s - 2p(p) - FINISH
2 laps = START - 1p/1s - 2s/2p - 1p/1s - 2p(p) - FINISH
3 laps = START - 1p/1s - 2s/2p - 1p/1s - 2p(p) - FINISH
```



Course 2:

This course should be considered in big fleets. The long first lap allows the fleet to spread out and avoid potentially dangerous crowding at the windward gate. The shorter second lap keeps the race within the target time and avoids sailors timing out on the course.

This course has been used successfully with a fleet of 85 boats on one start line.



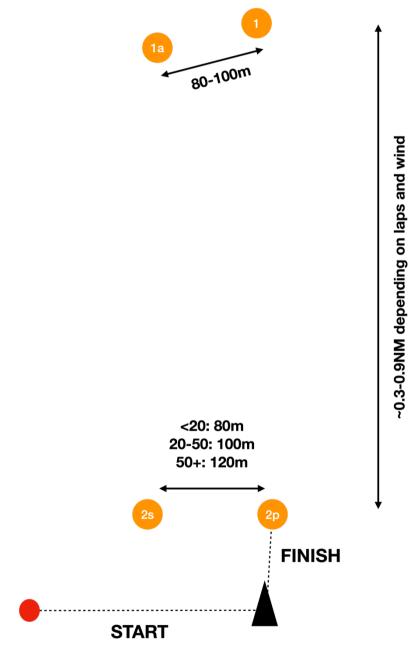
2 laps = START - 1p/1s - 3s/3p - 2p/2s - 3p(p) - FINISH



Course 3:

This course allows better tactical options with the leeward gate. The windward mark and spreader is easier to set than a gate and doesn't require matching marks if resource is limited. As there is a leeward gate, at least one dedicated lap-counting RIB is required during racing alongside counting from the committee boat.

This course is acceptable for all levels of competition, although a windward gate option would be preferred.



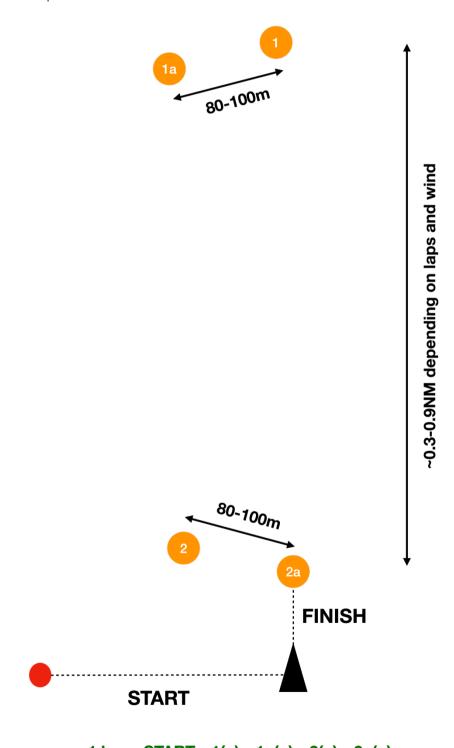
1 lap = START - 1(p) - 1a(p) - 2p(p) - FINISH 2 laps = START - 1(p) - 1a(p) - 2s/2p - 1(p) - 1a(p) - 2p(p) - FINISH



Course 4:

This course provides the least tactical options to sailors. However, every boat passes through the finish line every lap, so lap counting is simple, especially if the race team is short on resources.

This course should not be used for international competition but can be a good option for smaller, domestic competitions.

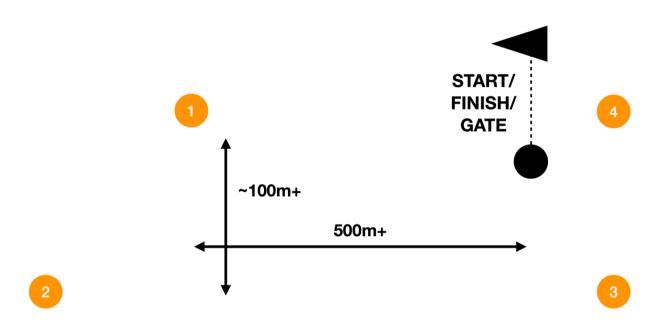


1 lap = START - 1(p) - 1a(p) - 2(p) - 2a(p)



Course 5 (NASCAR):

This course provides long reaching legs and minimal manoeuvres for mixed or less skilled fleets. It is particularly effective in marginal foiling conditions. The leg length can vary depending on fleet size and wind. The angle and length from mark 1-2 depends on the wind strength and gets deeper and longer as it gets windier (it should always be a comfortable foiling angle for all boats with a gybe around mark 2).



1 lap = START - 1(p) - 2(p) - 3(p) - 4(p) - GATE



SLALOM RACING

Slalom racing is a WASZP class favourite. For events lasting four days or longer, a day of Slalom racing should be included. For shorter events, Slalom may be included if the conditions are reliable enough that a full schedule of racing is expected. However, where there is doubt over the conditions, championship racing takes priority.

Slalom racing uses a course that is solely downwind and should only be done in foiling conditions (10 knots or more will see the whole fleet foiling). Each race is less than 5 minutes. For a more beginner-friendly option to slalom, consider the NASCAR course above.

Format

The Slalom series is scored separately to the championship series.

At major championships, Slalom is run as a knockout tournament with a series of heats, quarters, semis and finals. Providing there are enough sailors for at least two heats, a similar knockout format should be followed for all Slalom events. Heats typically have 8-12 boats depending on how the maths works out with the total number of competitors. Losers' races may be scheduled depending on the timing to allow those knocked out early to sail in more than one race.

Sailors should be fully aware of their route to the finals (and should be encouraged to have it written down onboard) and therefore know the race number and when to be at the starting area. This is vital to the success of the racing. At the end of this section, there is an example of a format used in an 80-boat fleet with heats of 10 boats. This format has a total of 17 races. Notice the routes to the finals at the bottom of the diagram.

The key to success in slalom racing is to fire the races off in quick succession. The Race Officer should ensure the race team and all sailors are well-briefed on the starting procedure to avoid delays and avoid the likelihood of sailors sailing in the wrong race.

Seeding

Heats should be seeded as evenly as possible. For international events, the RaceHub global rankings should be used to seed the heats. For domestic events, RaceHub is a good resource, but the National Class Association may seed the heats from domestic rankings if appropriate.

The Course

The course is pictured at the bottom of this section. A Race Officer should consider the angle of the first leg relative to the wind conditions. 90° is the default angle, but as the wind increases, the angle may need to be increased so that the reach is broader because a 90° TWA becomes a difficult angle to sail.

Evenly spaced marks perfectly in line with the TWA provides the most tactical opportunities for sailors.

An exclusion zone around the starting area is recommended to keep the area clear of non-racing boats.

The Start



The starting sequence for Slalom racing is 3,2,1,0. This changes RRS 26. The U flag is used for the preparatory signal in all cases. In the event of a general recall, the same race should be re-started.

The starting vessel must display the race number for each race so that the sailors know which race is theirs. This should be in the form of the code H# for heats, Q# for quarter finals and so on.

The first race should start on a significant timing with GPS time (for example, on the hour). Every race in each round (heats is one round, quarter finals is another etc.) should start on a set interval after this time (5 minutes works well). This helps sailors follow the timings if they get distracted. The orange flag remains displayed for the whole of each round. Between rounds, the orange flag should be removed to signify the change in round. It can be re-displayed 5 minutes later, or longer depending on whether sailors need time to make it back from the bottom of the course. There is an example of how the timings shape up below.

The Finish

The finishing line should be set approximately parallel to the downwind heading of a WASZP on port.

The finish vessel records the finishes for each race and displays the qualified sailors on a board for the sailors to check after they cross the line. This is particularly important if there are any UFD scores. The finish vessel may also display UFDs on a separate board.

Communication of boat numbers that scored UFD between the starting vessel and the finish vessel is critical and must be done immediately.

Scoring

If the grand final consists of more than one race, the scoring shall be calculated as in RRS 90.3.



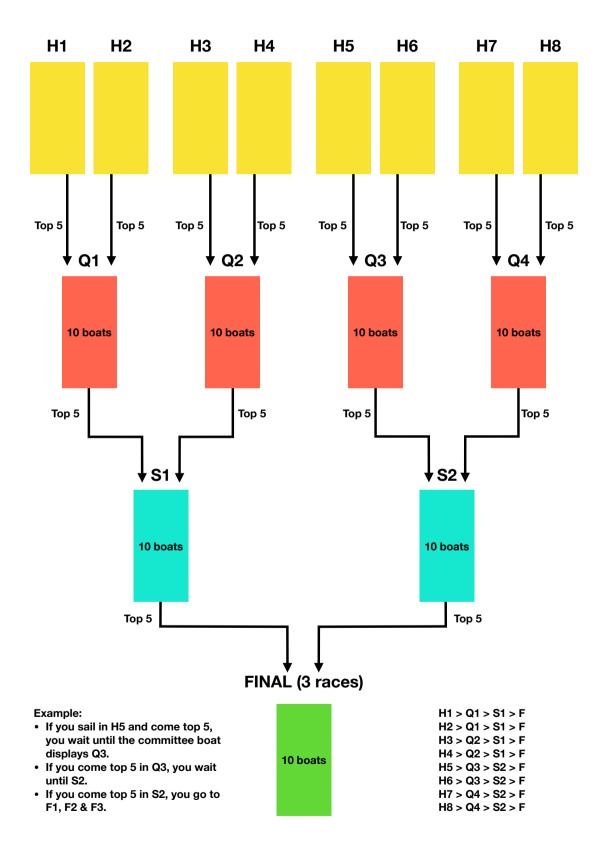
Below is an example of the timings of an 8-heat tournament up to the end of the semi-finals. The start of the first heat is 1100:

	1050	Orange flag displayed				
HEATS	1057	Warning signal displayed				
	1058	Preparatory signal displayed				
	1059	Preparatory signal removed				
	1100	Warning signal removed. Start of H1				
	1102	Warning signal displayed				
	1103	Preparatory signal displayed				
	1104	Preparatory signal removed				
	1105	Warning signal removed. Start of H2				
	1107	Warning signal displayed				
	1108	Preparatory signal displayed				
	1109	Preparatory signal removed				
	1110	Warning signal removed. Start of H3				
	After 8 heats					
	1135	Warning signal removed. Start of H8. Orange flag removed.				
	1140	Orange flag displayed				
	1147	Warning signal displayed				
0	1148	Preparatory signal displayed				
Q FINALS	1149	Preparatory signal removed				
	1150	Warning signal removed. Start of Q1				
		After 4 quarter finals				
	1205	Warning signal removed. Start of Q4. Orange flag removed.				
	1210	Orange flag displayed				
	1217	Warning signal displayed				
C	1218	Preparatory signal displayed				
S FINALS	1219	Preparatory signal removed				
	1220	Warning signal removed. Start of S1				
		After 2 semi-finals				
	1225	Warning signal removed. Start of S2. Orange flag removed.				
Display orange when all final sailors are in the starting area. If doing more than 1 final race, more time is needed between races to allow the competitors to return to the start.						

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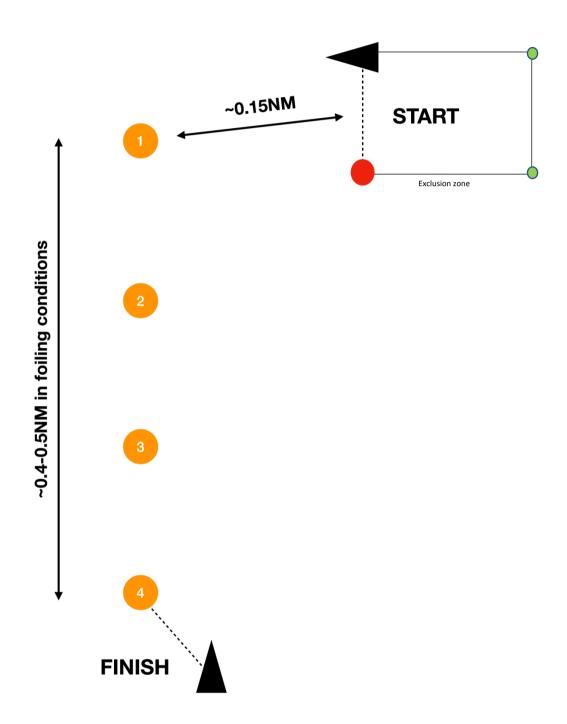


Below is an example of the Slalom format used at the 2021 European Games with 80 competitors:





The Slalom Course:



START - 1(p) - 2(s) - 3(p) - 4(s)/FINISH