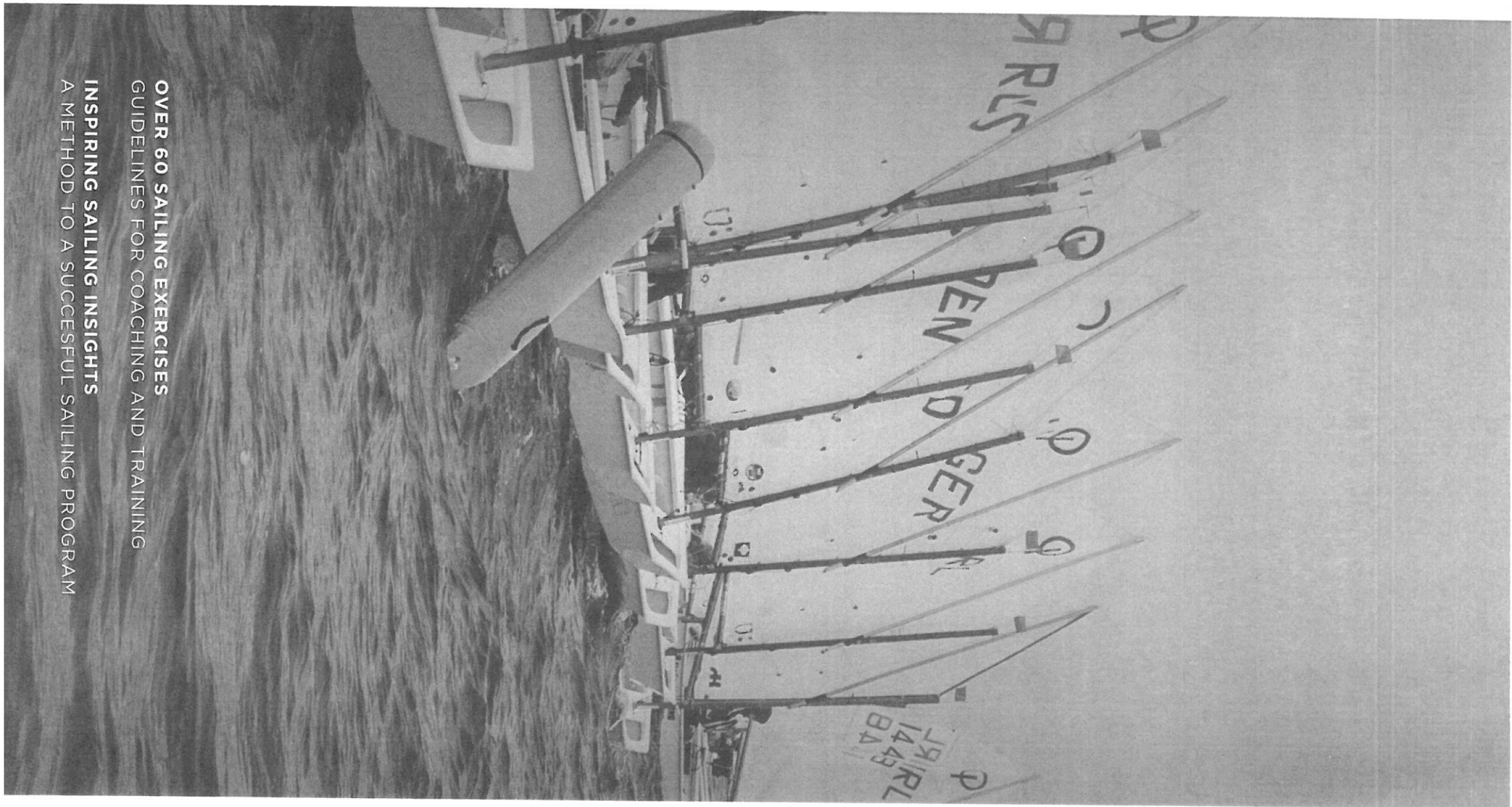


DRILLBOOK

THE DINGHYCOACH METHOD

OVER 60 SAILING EXERCISES
GUIDELINES FOR COACHING AND TRAINING
INSPIRING SAILING INSIGHTS
A METHOD TO A SUCCESSFUL SAILING PROGRAM



USER MANUAL

Level

This indicates the level of the drill, how hard is it to execute and whether the drill more suitable for beginners or for more experienced racers. It's important to pick the right level of drill for the group of sailors. Too easy and the sailors will not get challenged enough, too difficult and the sailors might get overwhelmed or frustrated.

Level indicated by stars:

- ☆☆☆ Beginning racer
- ★★☆ Intermediate racer
- ★★★ Experienced racer

Objective

This describes the goal of the drill. What is the learning goal and what should be the end result after doing this drill.

Description

Here you can find a short description on how the drill works. Connect this to the image and you will have a clear explanation on how to set up or use the drill.

Tips

Here you will find a few practical pointers on how to use the drill, from what angle to shoot video footage or what to explain the sailors beforehand.

CONTENTS

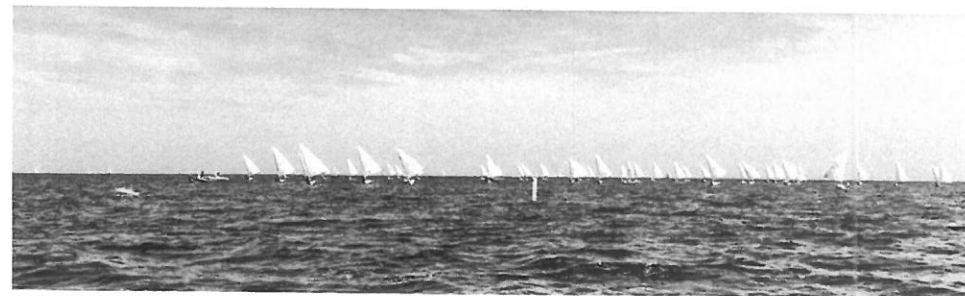
Boat handling	6
☆☆☆	8
★★☆	18
★★★	23
Boat speed	26
☆☆☆	28
★★☆	31
★★★	37
Strategy & tactics	38
☆☆☆	40
★★☆	47
★★★	49
Starting	60
☆☆☆	62
★★☆	67
★★★	72

WINNER'S EYES

BY HUUB LAMBRIEX

Training your state of mind: getting in and out of the "groove".

There is good news for the ones who want to train and improve their mentality and attitude towards performing! It is possible to train and adjust your mentality easily and simple. It all has to do with shifting your focus on to how you look at certain things, instead of what you look at. When racing, you keep your boat on track and "in the groove" using your skills and boat tools (trim, set-up, body position). The right track is the one with maximum speed and pointing. Your attitude or mentality can be adjusted in exactly the same way during your campaign, training or program to achieve maximum development. How to do this?



"Winner's eyes". You can look at the concept of winner's eyes like looking through a pair of glasses, looking through winner's eyes you see opportunities to achieve goals or grow towards them. It enhances effective training, proactiveness, persistence, curiosity, constructiveness, win-win cooperation, concentration and focus. Getting the best out of yourself as an athlete or as a coach. Some people refer to it as being "in the groove". You are doing well and things are running smooth! Of course it is also possible to get out of the groove very easily. Things are not going well, it is hard to focus and you are underperforming. Whenever you get distracted from winner's eyes you can recognize this by seeing certain behaviour like: passive behaviour, dullness, complain-and-blame and self-centeredness. All kinds of behaviour that will not help you achieve your goal or get you to where you want to be.

As soon as you see that you are out of the groove, try to look through winner's eyes by asking yourself the following questions: What do I want? What possibilities are there? What can I do to get closer to achieving my goal? These are all questions that make you focus on elements you can control and adjust.

Improving yourself or your sailors is not about the amount of hours or work you put into training. It is the way you train and work that determine how effective you are. By looking through winner's eyes, you try to be as efficient and effective as you can toward achieving your goals!

BOAT HANDLING



Boat handling.

Good boat handling can help you win races. It can help you win the start, give you extra options in busy markroundings and good tacking and gybing can give you just those few extra centimeters you need.

It is important to understand that you need good boat handling to win races because you always need boat handling the most in critical moments of the race like after a start or close to a mark or finish. It is at those moments you can win or lose distance you have been fighting for the entire race!

Also important to understand is that every sailor has a different learning style and needs to be coached in a different way. Every individual asks for a different approach.

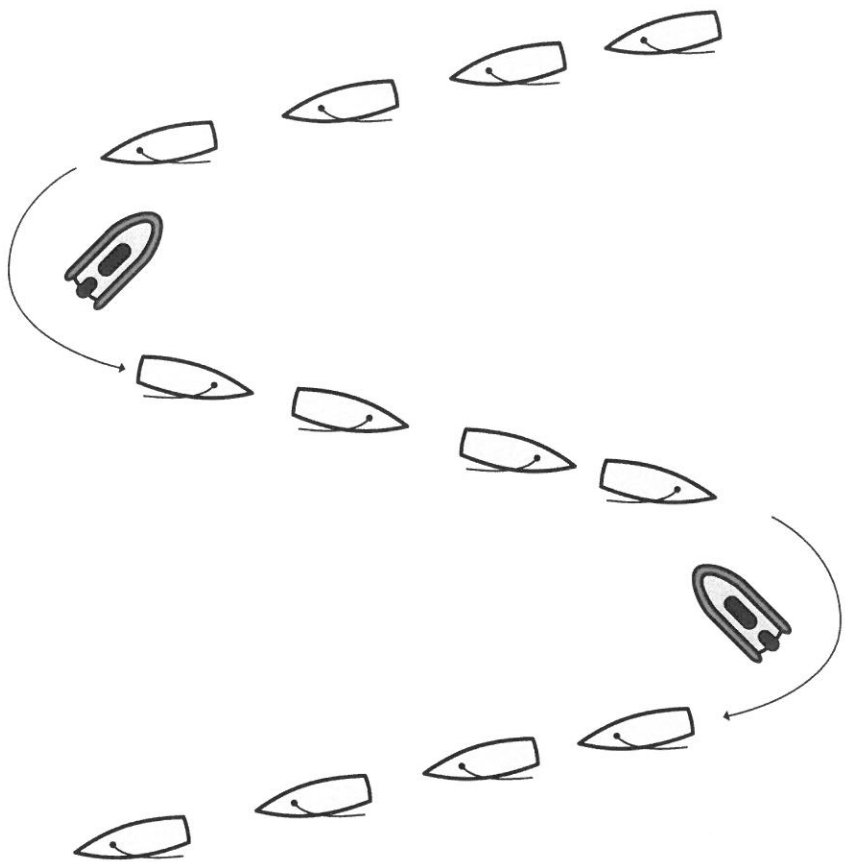
Let's take rolltacking as an example. For some sailors it is enough to show a video of a perfect tack. They will have that image in their head and will try to copy it themselves. Other sailors want to know the goal, what do you want to achieve with a rolltack and why? Another sailor might want to know step by step in detail what actions need to be done. Some want to start trying others prefer to watch and analyse first. Make sure you use different approaches to have the best effect for all sailors in your group or, if coaching individually, figure out what learning style your sailor has.

Some tips:

- Make the training as simple as possible. Focus on a specific aspect without competitors and/or time limit.
- As things are going well, make the exercise more difficult (changing the exercise, have sailors closer together, use a time limit for pressure, etc.).
- Focus on what is going well and give 1 or 2 specific points to improve.



WIND



REACH TO REACH GYBING

LEVEL: ★☆☆

OBJECTIVE

Learning how to make a technically well executed reach to reach gybe.

DESCRIPTION

Sailors follow the coachboat sailing in a reach. Then when the coachboat stops they gybe around the coachboat going on another reach following each other.

TIPS

- Make a video when sailors gybe around the coachboat to get an idea of what movements and steps the sailors go through while making a reach to reach gybe.
- Make the angle that sailors sail towards the coachboat higher or lower to make the drill more difficult or easier.

LEEWARD MARK ROUNDING

LEVEL: ★☆☆

OBJECTIVE

Make a good and fast leeward mark rounding. This consist of the following aspects:

- Clean boat (control lines ready, sheet prepared)
- Adjust control lines
- Centerboard down
- Head up using leeward heel (shift bodyweight inside and trim in sheet)
- Entering the mark rounding wide
- Exiting the leeward mark as close as possible on an upwind angle.

TIPS

- Good exercise when you have there are large differences inskills within the group.
- Good exercise in conditions in which you want to have sailors together for safety.
- If it's difficult: focus only on tacking or gybing to give sailors time to evaluate and watch others.

DESCRIPTION

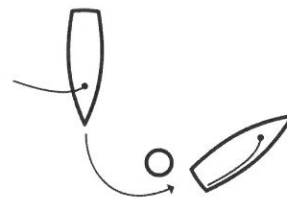
After a good briefing about how to round the leeward mark sailors practise this on a relatively small windward/ leeward course. Anchor the rib near the mark and ask sailors to come to you for questions or when you have something to say. In a small group sailors can tack quickly after the rounding for another one. Make video's for the debrief.

Make the exercise more difficult by:

- Approaching on starboard tack
- Gybing during the rounding
- Making a tack right after rounding the mark
- Approaching on starboard tack and making a tack right after rounding the mark
- Bringing the boats closer together

WIND

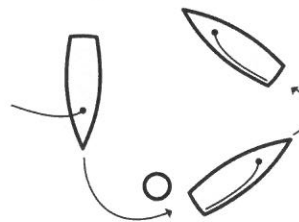
"Easy approach"



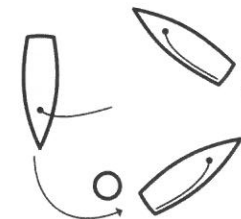
"Approach on starboard"



"Right tack after rounding"



"Approach on starboard and tack right after rounding"



ROUND THE COACHBOAT

LEVEL: ★☆☆

OBJECTIVE

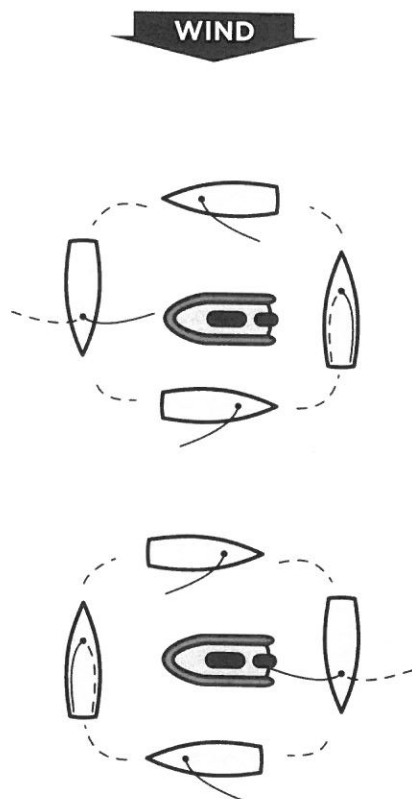
To improve boathandling under pressure. Also a good drill to gather a group.

TIPS

- Change clockwise rotation to counter clockwise rotation with whistle signals to mix up the drill.

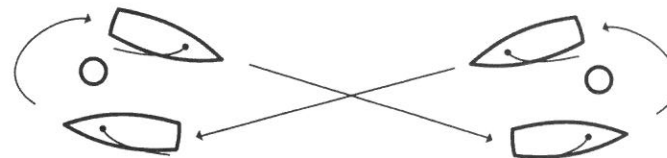
DESCRIPTION

Give a whistle command which was discussed with all sailors to have all sailors circle around the coachboat.



WIND

Tacking around marks:



Gybing around marks:

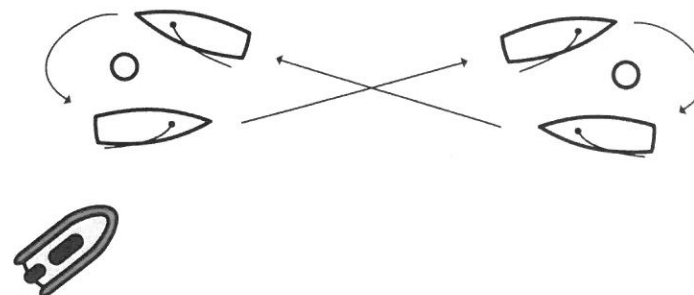


FIGURE 8 SAILING

LEVEL: ★☆☆

OBJECTIVE

To perform good tacks, gybes and bear aways in a busy and tiring situation. Boathandling is always important, especially under pressure!

TIPS

- Make clear what each whistle means
- Make two courses in case of 5+ boats
- Touching the mark is NOT allowed
- Focus on how sailors execute the technique
- Sailors should sheet in completely when doing a tack

DESCRIPTION

Sailors sail figure 8 between two marks. They are racing and should try to pass the boat in front, respecting the rules. At 1 whistle they all turn around and sail the course the other way. The exercise can be made more difficult by letting sailors do an 360 around the mark every time. Then it's a 'Figure 8 with loop'.

SNAKE

LEVEL: ★☆☆

OBJECTIVE

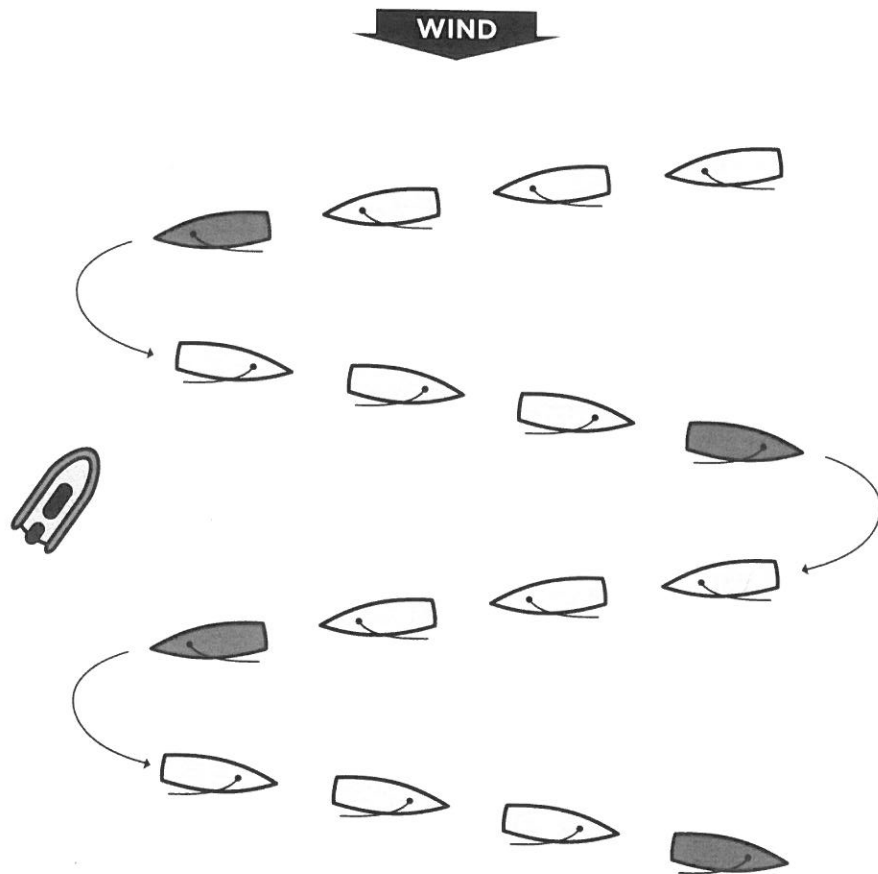
Control the boat's movement better and react quicker to accelerate and stop the boat

DESCRIPTION

Sailors have to stay with their bow within 1 meter from the stern of the boat in front. They make a line and follow the leader around some buoys. The leader can decide the course and the speed.

TIPS

- Be strict about the rules (max. 1 meter distance)
- Rotate leader position
- Make two groups in case of 6+ boats
- Encourage them to make it hard for each other
- Sailors in the back of the line can anticipate by watching the first boat too.



FOLLOW THE LEADER

LEVEL: ★☆☆

OBJECTIVE

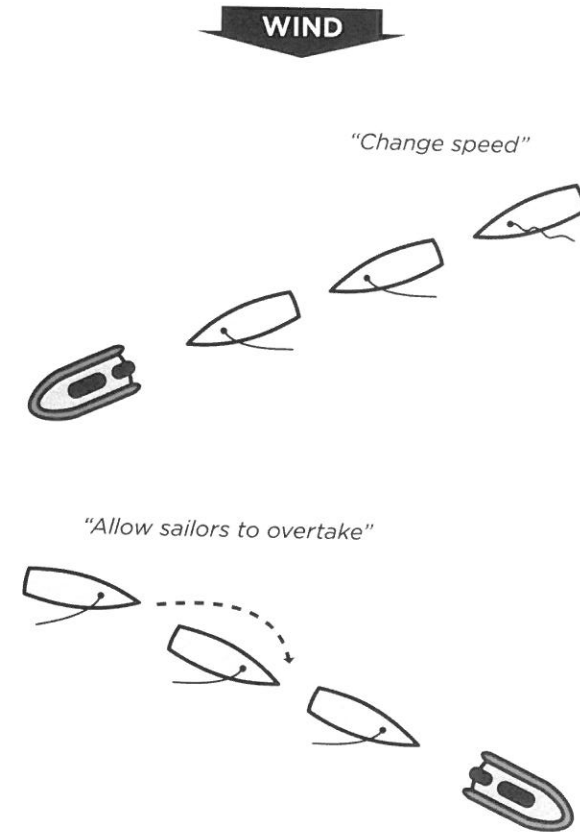
Controlling boatspeed and responding to changes by using three tools: body, mainsheet and rudder. This drill improves acceleration and stopping the boat.

DESCRIPTION

Line up the sailors in a reach by having them follow the coachboat. Slow down and speed up with the coachboat to make sailors accelerate or stop their boats.

TIPS

- Differentiate this drill by telling the sailors to have more or less distance in between separate boats.
- Allow sailors to overtake to create a racing element.



GYBING ON THE WHISTLE

LEVEL: ★☆☆

OBJECTIVE

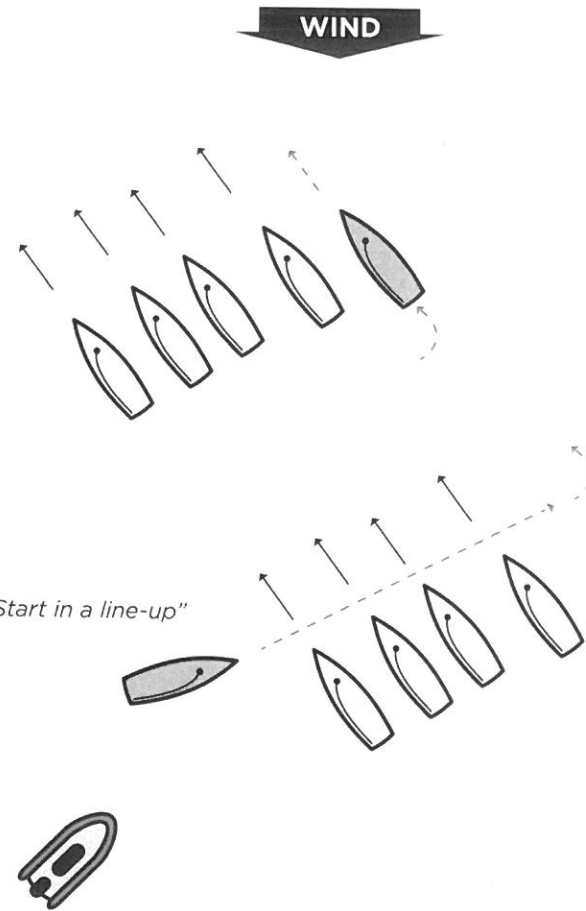
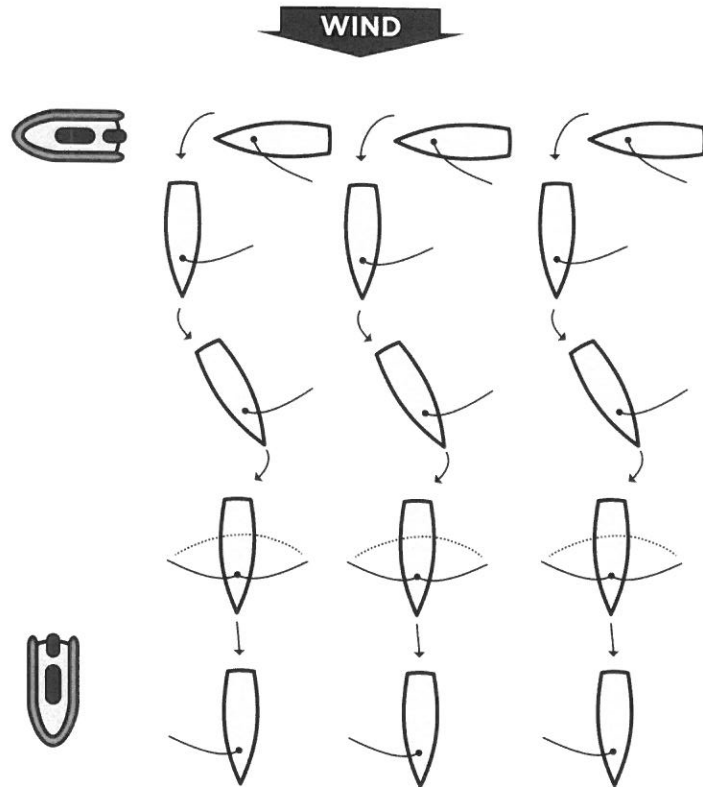
Practicing good technical gybes.

DESCRIPTION

After a rabbit start or normal start, sailors start sailing upwind towards the top mark. On both sides of the beat there is a boundary (like in the America's Cup). Sailors are not allowed to cross these boundaries and therefore they need to tack to stay in the middle. Several marks can indicate the forbidden zones or the coach can drive upwind with the coachboat indicating the boundary.

TIPS

- Make sure all the commands are clear to the sailors. Discuss all commands before going out on the water so everybody knows what to do.



LINE-UP/RABBIT START

LEVEL: ★☆☆

OBJECTIVE

The line-up or rabbit start is a way to have a group of sailors start more or less equally. It is the basis for many other drills or practicing. A Line-up of rabbit start can be used to practise:

1. speed tests
2. tacking on the whistle

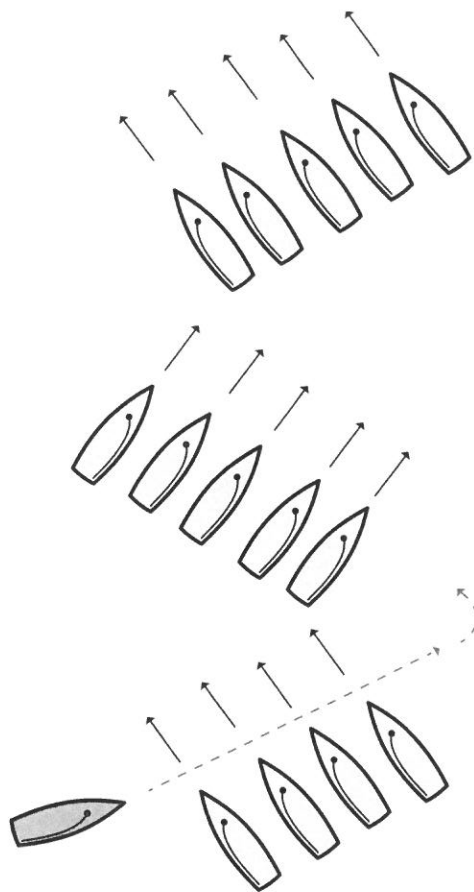
TIPS

- Tell sailors to cross behind the rabbit with a bit of distance between each other, so all sailors will have a clear lane.

DESCRIPTION

All sailors line up on a certain tack (starboard in this example). Another boat, the rabbit (orange boat in this example) will come on port sailing an upwind angle. All boats cross behind him as close as possible. As soon as the rabbit crossed all other boats, he tacks onto the same tack as all other boats and now is the most windward boat in the line-up.

WIND



TACKING ON THE WHISTLE

LEVEL: ★☆☆

DESCRIPTION

Start in a line-up or rabbit start. As sailors are lined up. Give them signals with a whistle. For instance:

- 1 whistle: tack
- 2 whistles: double tack

This way the coach determines when sailors tack. He can now film tapetacks or help sailors out individually to improve their tacks.

OBJECTIVE

Practicing good technical tacks.

TIPS

- Make sure all the commands are clear to the sailors. Discuss all commands before going out on the water so everybody knows what to do.

UP/DOWN COURSE

LEVEL: ★☆☆

OBJECTIVE

Each sailor can practise tacks and gybes on their own level. The coach has time to look at everybody and to talk to individual sailors.

DESCRIPTION

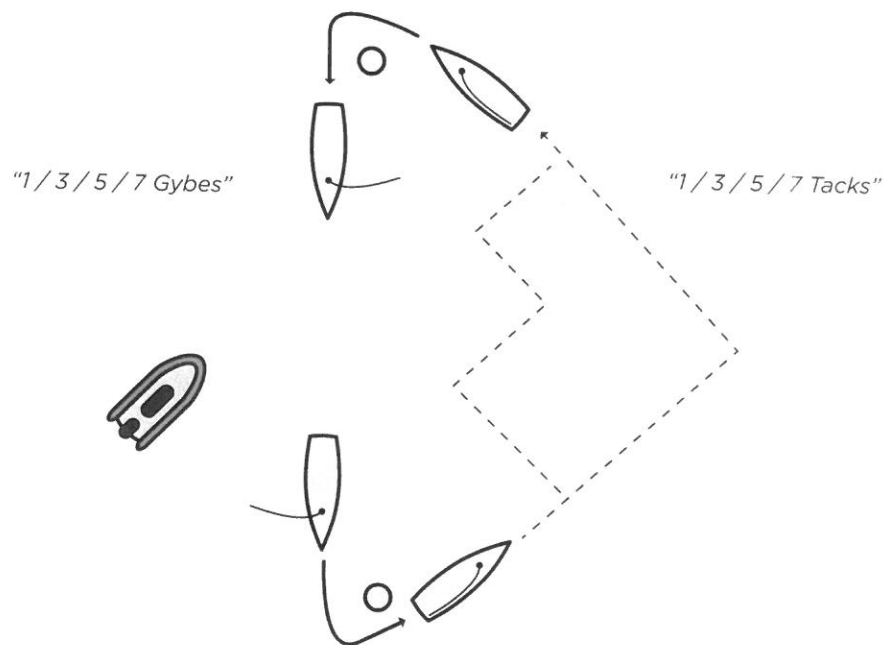
Sailors practise their tacks and/or gybes on a normal up/down course. Depending on their skills they can practise on their own level. The following options make it more difficult:

- 1) adding more tacks and gybes per leg (1, 3, 5, 7 etc.)
- 2) shortening the course
- 3) bringing the boats closer to each other
- 4) doing a tack and gybe at every mark rounding

TIPS

- Good exercise when there are large differences in skills within the group
- Good exercise in conditions in which you want to have sailors together for safety.
- If it's difficult: focus only on tacking or gybing to give sailors time to evaluate and watch others.

WIND

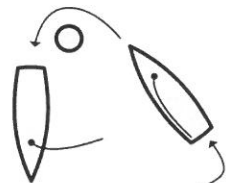


WIND

"Easy approach"



"Approach on port"



"Gybe after mark rounding"



"Small buoy next to top mark"



WINDWARD MARK ROUNDING

LEVEL: ★★★

OBJECTIVE

Practicing good technical tacks.

DESCRIPTION

Start in a line-up or rabbit start. As sailors are lined up give them signals with a whistle. For instance:

- 1 whistle: tack
- 2 whistles: double tack

This way the coach determines when sailors tack. He can now video tapetacks or help sailors out individually to improve their tacks.

TIPS

- Make sure all the commands are clear to the sailors. Discuss all commands before going out on the water so everybody knows what to do.

SLALOM RACING

LEVEL: ★★★

OBJECTIVE

Learning how to make reach to reach gybing in a racing situation and learning how to effectively reach in a racing situation.

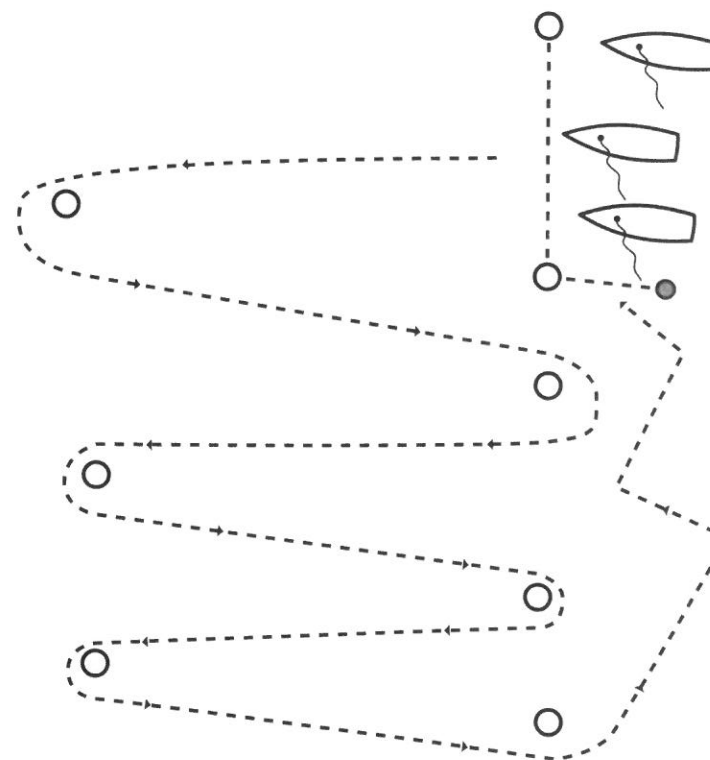
DESCRIPTION

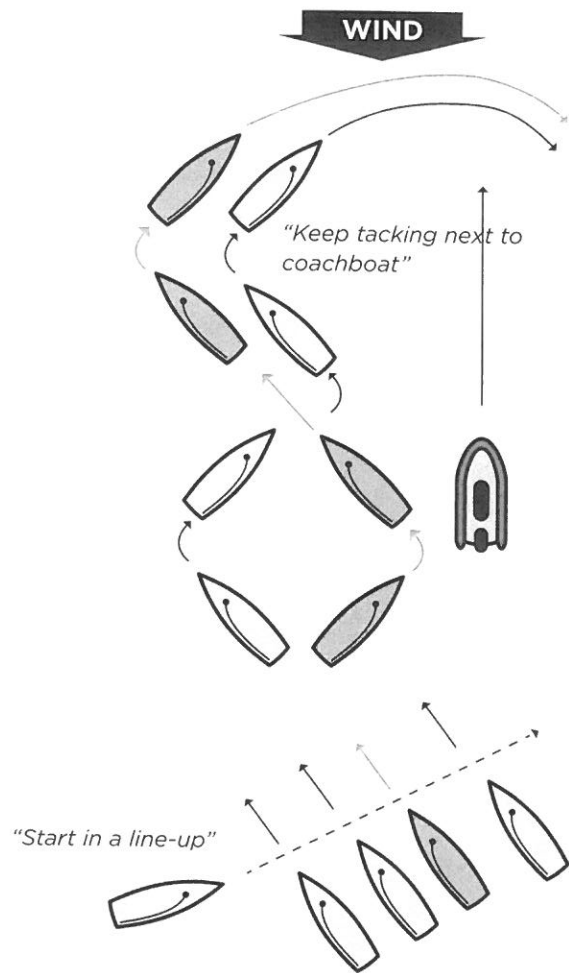
Sailors start with a reaching start and gybe around the slalom marks. After rounding the last mark they sail an upwind back up to the starting line to finish, getting them in position for the next start.

TIPS

- Make videos when sailors gybing round the slalom marks to get an idea of what movements and steps the sailors go through while making a reach to reach gybe.

WIND





TACKING NEXT TO COACHBOAT

LEVEL: ★★★

OBJECTIVE

Practicing a technically well-executed tack with the pressure of other boats around you.

DESCRIPTION

Start in a line-up or rabbit start to have the sailors start equally. Drive the coachboat to windward of the group to be the windward mark. Sailors try to round the coachboat as a windward mark keeping the coachboat to Portside. The coachboat continues to move forward, making sailors tack and double tack next to the coachboat. Sailors need to focus on making technically well-executed tacks and also have to mind their positioning compared to the other boats around.

TIPS

- Tell sailors who fall behind to sail a bit over layline and tack back. Since the coachboat is moving forward, they will catch up again and put more pressure on the boats in front.
- Because sailors have to keep the coachboat to port, they can get an inside advantage at the mark on starboard.

TACK/GYBE COURSE

LEVEL: ★★★

OBJECTIVE

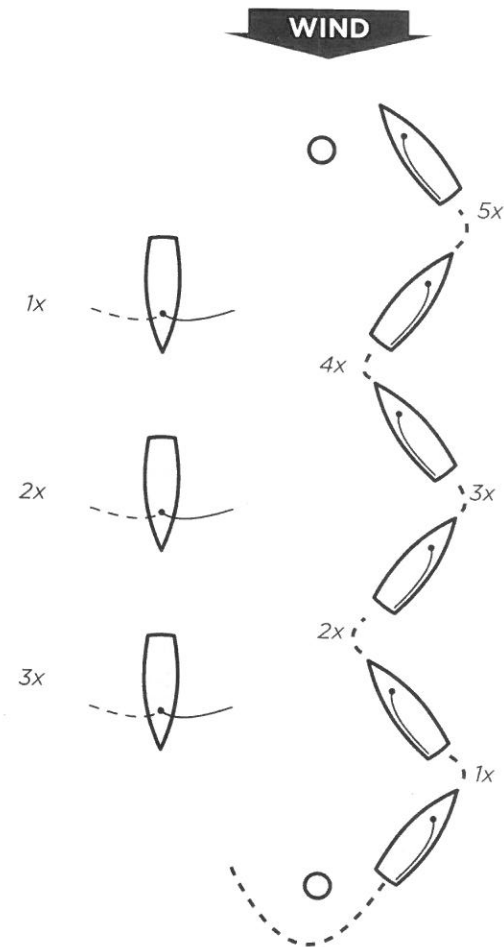
To improve boathandling skills on a course

DESCRIPTION

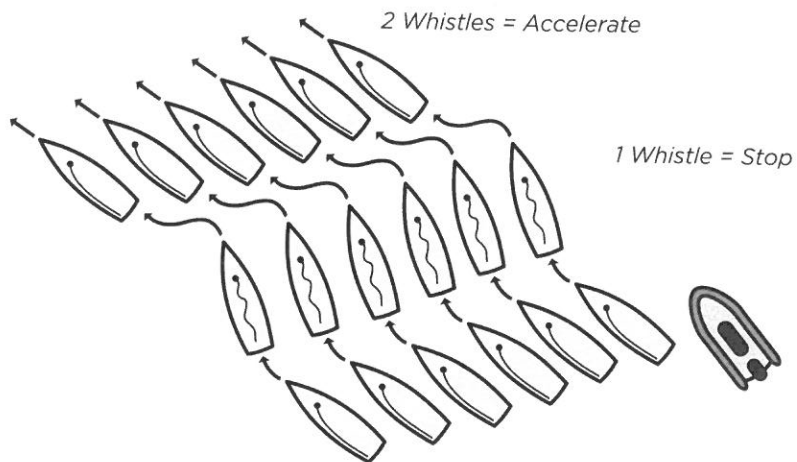
Put in a windward/leeward course using two marks. Set an amount of tacks/gybes for the sailors to achieve and have them sail the course for instance, with five tacks and three gybes.

TIPS

- Differentiate by changing the length of the course or changing the amount of manoeuvres.
- The shorter the course, the more difficult.
- The more manoeuvres, the more difficult.



WIND



STOP/START LINE-UP

LEVEL: ★★★☆

OBJECTIVE

Practicing a technically well-executed tack with the pressure of other boats around you.

DESCRIPTION

Line-up all boats using a rabbit start or a gate start. Ordering sailors to stop and accelerate while sailing upwind by giving whistle commands.

TIPS

- Change drill on tacks. Stop and start on both starboard and port.

ARGENTINA

LEVEL: ★★★

OBJECTIVE

To gain control out of a leeward position.

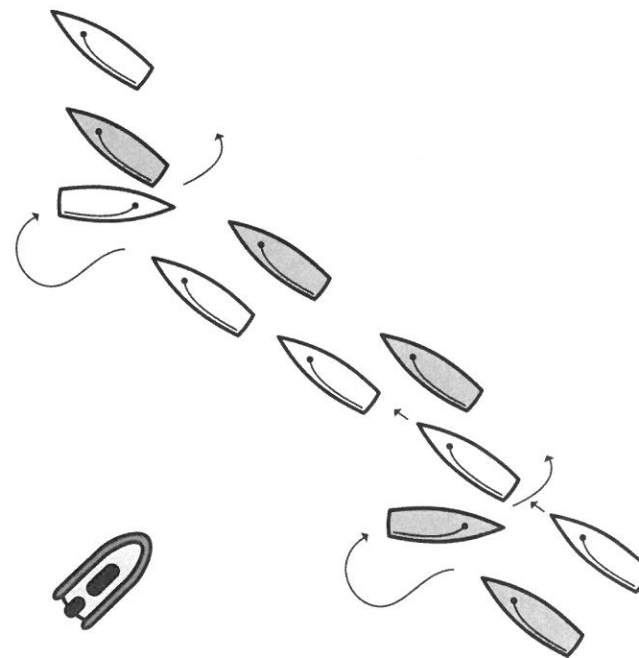
DESCRIPTION

Two boats sail upwind on starboard tack. The leeward boat (green) bears away until he/she can duck the windward boat at full speed. After the duck this boat sails 2 boatlengths before he/she tacks again. With technically well-executed tacks the new windward boat should be in control of the other boat, because he/she is unable to cross safely.

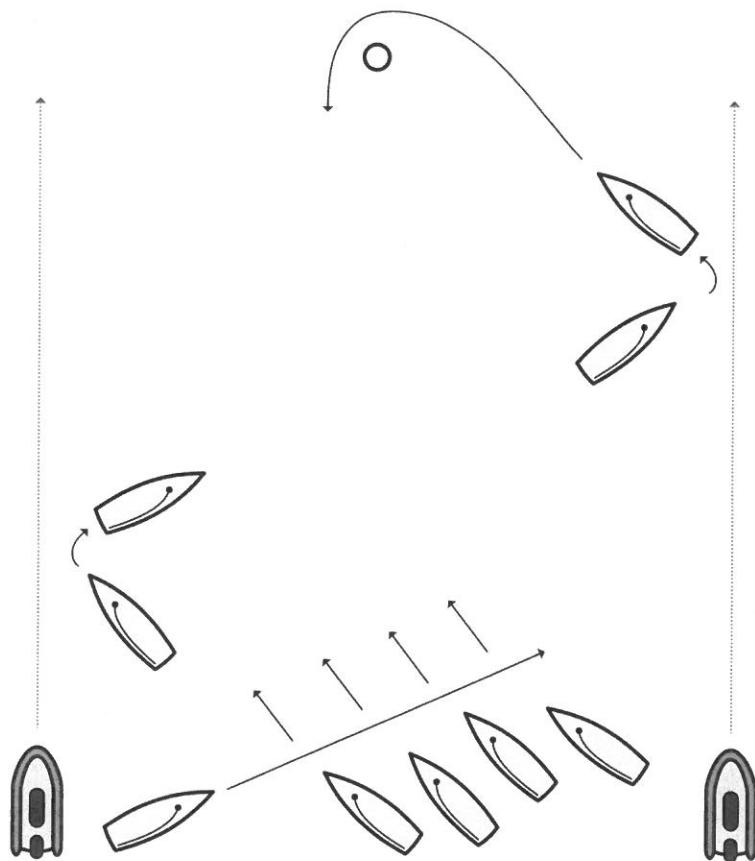
TIPS

- Make sure sailors know the rules well (RRS 10 till RRS 17).
- Explain the difference between loose and tight cover.

WIND



WIND



BOUNDARY RACING

LEVEL: ★★★

OBJECTIVE

To learn and practise the importance of good boat handling, planning and tactical decisions in tight situations.

DESCRIPTION

After a rabbit start or normal start, sailors start sailing upwind towards the top mark. On both sides of the beat there is a boundary (like in the America's Cup). Sailors are not allowed to cross these boundaries and therefore they need to tack to stay in the middle. Several marks can indicate the forbidden zones or the coach can drive upwind with the coachboat, indicating the boundary.

TIPS

- Be strict on rules, outside the boundary means doing a 360 penalty turn.
- Explain rules RRS 19 and RRS 20.
- Ideally you can use two coachboats to indicate upwind boundaries.

CHAOS DRILL

LEVEL: ★★★

OBJECTIVE

To improve boathandling under pressure and identify weaknesses in boathandling whilst under pressure

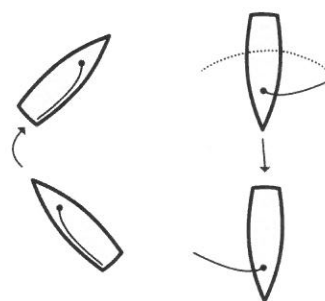
DESCRIPTION

Give sailors different commands with whistle.

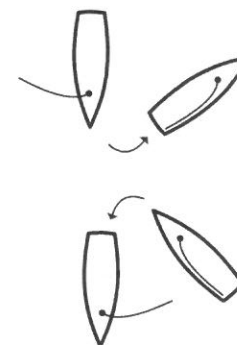
TIPS

- Follow up different commands to create pressure
- The faster you follow up different commands the more difficult it becomes for the sailor.

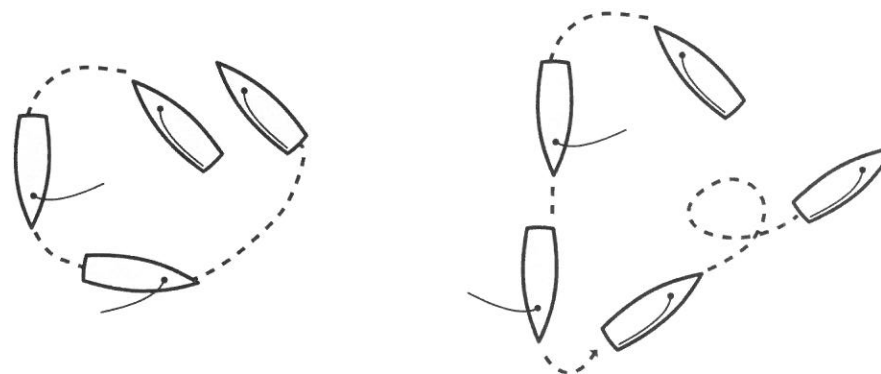
1 whistle: tack or gybe



2 whistles: bear down or head up



3 whistles: 360 degree penalty turn



BOAT SPEED



Boat speed

Having great boat speed is a big advantage on the race course. When you are faster it's easier to win races. You will have more options after the start and you can sail the course taking less risks. No wonder that many topsailors spend a lot of time to get that little bit faster than their opponents.

Boat speed can be divided in different aspects.

- technique
- boat setup (sail trim, hiking straps)
- sailor (weight, strength)
- equipment selection (type of sail, mast and hull)
- equipment optimizing (cleaning, polishing, new ropes)
- developing new equipment

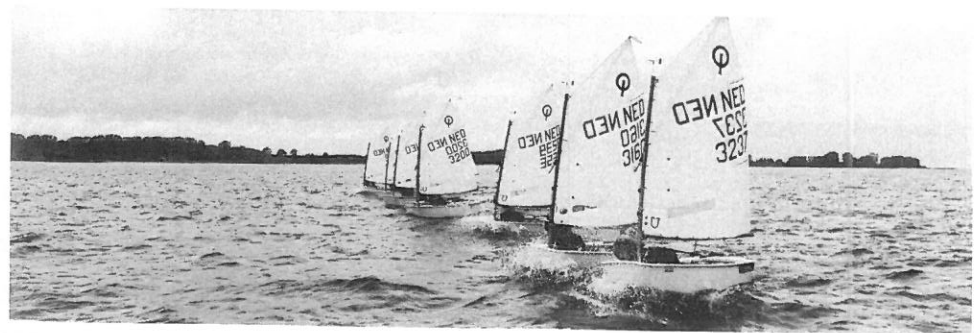
In this book we focus on how to improve your sailor's technique and boat setup. Don't forget that the other aspects are important too!

A balanced boat is needed for good boatspeed. A well balanced boat is easy to sail, fast and easy to steer. First step for balance is a good trim/setup. With a sail that is too deep in heavy air, it's impossible to sail the boat flat and fast. When the setup is right there are 3 more tools a sailor can use to balance the boat and sail fast: body, mainsheet and rudder.

- Body is about how the sailor is positioned and moving in the boat (windward/leeward, fore/aft, hiking, pressing, body movements, hipflicks).
- Mainsheet is about keeping the boat in balance by using the sheet.
- Steering is about adjusting the course to keep the boat balanced and fast

Focussing on a specific aspect can help the sailors and coach to make more and faster progress. The ultimate goal is to sail the boat balanced at all times. That means that all 4 tools need to be adjusted the whole time to the ever changing conditions. In the Optimist in which it is not possible to change the trim/setup during sailing, only 3 tools are left. Video footage can help to, together with the sailor, analyze whether the boat is always balanced (sideways and fore/aft). Sailing in a straight line for a long time can get boring. Here are a few tips how to prevent this:

- work with specific (individual) focus points
- give sailors room to address their own focus points (make them specific)
- make the sailor responsible for their own focus points
- have short breaks to relax and evaluate
- set a finish time for each speed test (for example 3 minutes)
- add competitive elements and encourage sailors to see each speed test as a race
- add boathandling elements (for example tacks or gybes)



LINE-UP DOWNWIND 1 BY 1

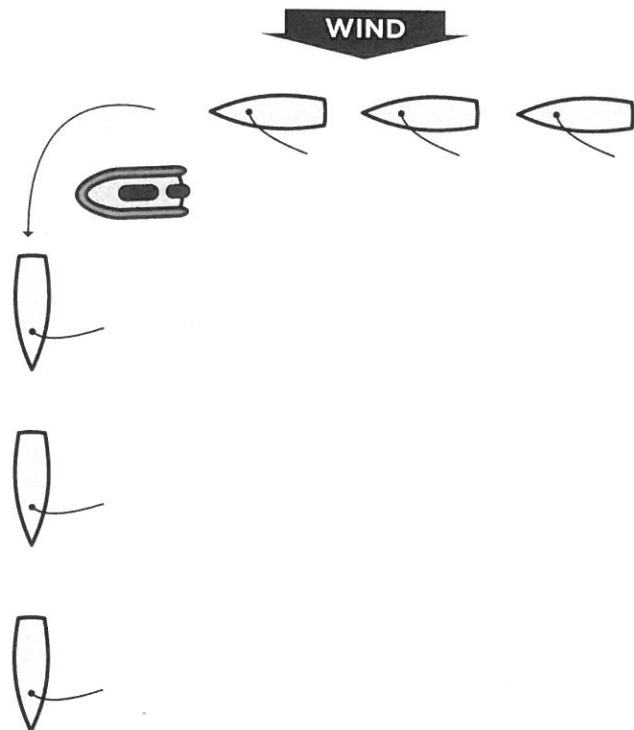
LEVEL: ★☆☆

OBJECTIVE

Starting a downwind speed run with enough space to manoeuvre for each boat.

DESCRIPTION

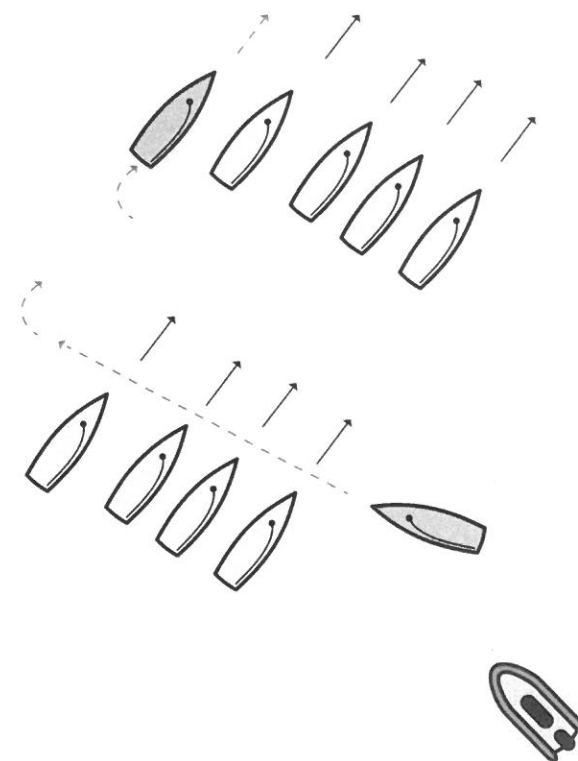
Start sailing in a reach following the coachboat. As sailors are lined up in a reach, the coachboat stops and sailors round the coachboat as a reachmark and start sailing downwind. This will have the sailors start sailing downwind one by one instead of all together at the same time, spreading the fleet out a bit. This makes sure all sailors have enough space to manoeuvre.



TIPS

- Make sure it is not always the same sailor rounding the coachboat in first position.
- The coachboat can circle in a reach, having all sailors following the coachboat.
- To get all sailors together if they are spread out.

WIND



LINE-UP OR RABBIT START

LEVEL: ★☆☆

OBJECTIVE

The line-up or rabbit start is a way to have a group of sailors start more or less equally. It is the basis for many other drills or exercises. A line-up or rabbit start can be used to practise:

1. Speed tests.
2. Tacking on the whistle.

TIPS

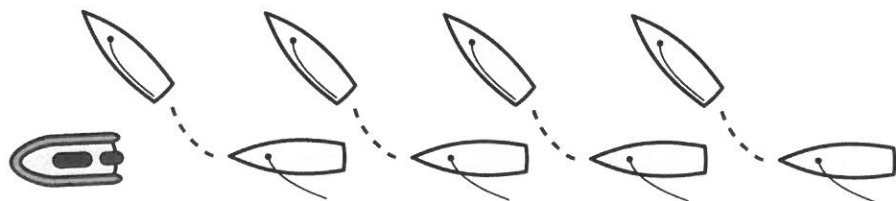
- Tell sailors to cross behind the rabbit with a bit of distance between each other, so every sailor will have a clear lane.

DESCRIPTION

All sailors line up on a certain tack (starboard in this example). Another boat, the rabbit (orange boat in this example) will come on port sailing an upwind angle. All boats cross behind him as close as possible. As soon as the rabbit crossed all other boats, he tacks onto the same tack as all other boats and now is the most windward boat in the line-up.



WIND



UPWIND LINE-UP ON COMMAND

LEVEL: ★☆☆

OBJECTIVE

To make boats line-up equally for a speed test

DESCRIPTION

Have all boats follow the coachboat in a reach. As soon as all boats are in a straight line, give a whistle signal to make them sail upwind.

TIPS

- Pay attention how the boats line up. If you start too much on a close reach, it will be difficult to keep the line-up. If you start too open, the line-up will be too easy.

SAIL WITH FIXED RUDDER

LEVEL: ★☆☆

OBJECTIVE

Learn to sail the boat in a straight line without using the rudder, focussing more on the other speed tools like : set-up / body or hiking / mainsheet.

DESCRIPTION

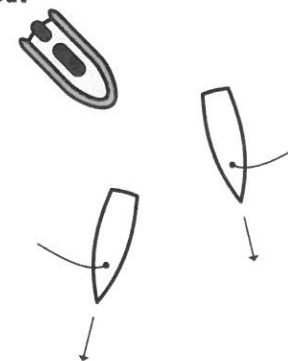
Find a way to fix the rudder, preferably in a way that it comes loose quickly in case of emergency. Try to sail the boat in a straight line and anticipate gusts and lulls. Learn how much effect set-up, hiking and mainsheeting have on the balance and poining of the boat. This exercise can be done sailing all courses. Upwind it shows the effect of hiking and sheeting. Downwind it shows how critical the balance of the boat is. Remember, the basic principle is: steering is drag and drag is slow!

TIPS

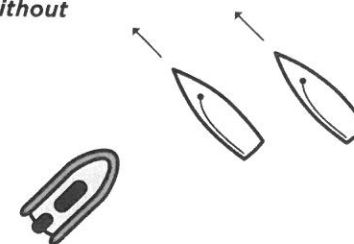
- Make sure this exercise is safe, it's should not be too windy or not too busy on the water.
- Have sufficient space between boats to avoid collisions.

WIND

"Downwind sailing without using the rudder"



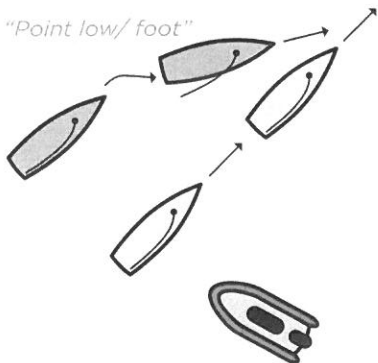
"Upwind sailing without using the rudder"



WIND

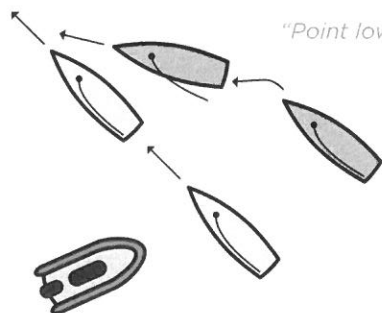
"On port tack"

"Point low/ foot"



"On starboard tack"

"Point low/ foot"



FOOTING

LEVEL: ★★★

OBJECTIVE

Learn to sail a fast/low "mode" upwind, without sailing any extra distance.

TIPS

- Make pairs of sailors with similar boatspeed.
- Let the sailors line-up less than 2 boat lengths from each other
- Make sure sailors are still sailing upwind and not reaching.
- Rotate positions between sailors, so each sailor gets to do every task.
- Talk about rig set-up and technique so sailors know what they are looking for during the drill.

DESCRIPTION

At least two boats do a line-up upwind. The goal of the windward boat (orange) is to "roll" the leeward boat (blue), by sailing in a little lower and faster angle. Once he/she succeeded, start the drill over again. If the leeward boat has no problem holding his/her lane, start over again as well.

LINE-UP DOWNWIND TEAM

LEVEL: ★★★

OBJECTIVE

To start a speedrun downwind with all boats at the same time.

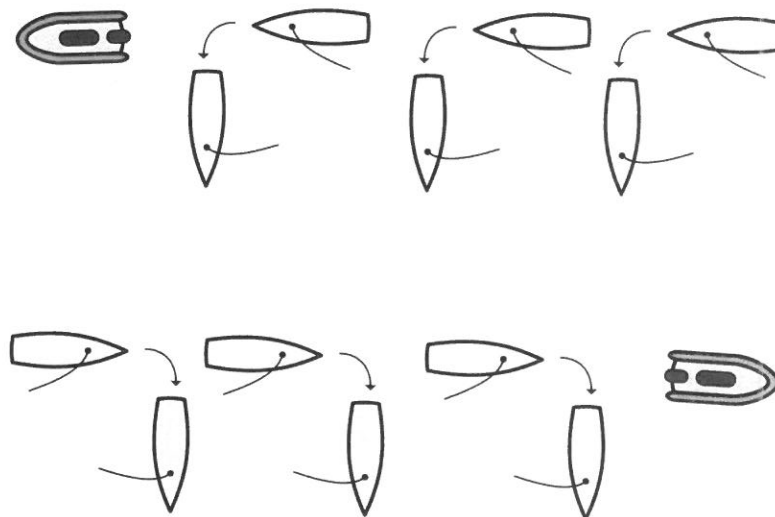
DESCRIPTION

Drive a crosswind course with your rib and whistle multiple times while waving with one arm parallel on the ribs course. All boats should now line up in a row behind the rib while you are driving. Give one loud whistle to start and all boats bear away to downwind.

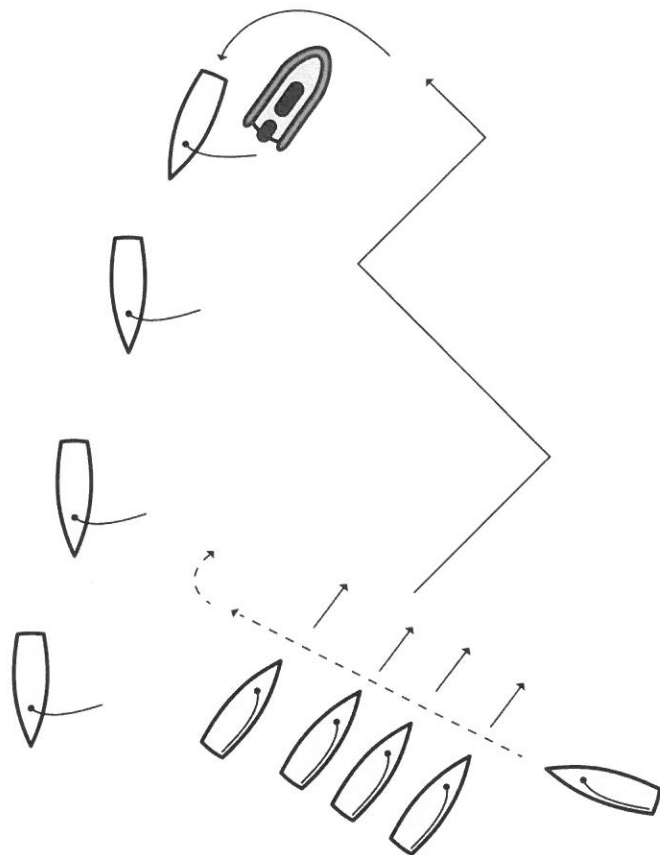
TIPS

- Explain the procedure before going out.
- Make sure you are driving exactly crosswind to secure a fair start.
- Have a mark downwind / a visible goal where you are heading to.

WIND



WIND



LINE-UP DOWNWIND WITH MARK

LEVEL: ★★★

OBJECTIVE

To have a realistic downwind speed run (like in a race) with boats coming around a windward mark one by one.

DESCRIPTION

Start with a rabbit run. As soon as all boats are on the same tack they should almost be able to lay the top mark (the mark can also be the rib). They round the mark/rib as in a race and start downwind. This exercise is more realistic. Sailors have a bit more room to make turns and have to make sure they have clean air.

TIPS

- Watch the rules during the markrounding. Give penalties if necessary.
- Have a mark downwind / a visible goal where you are heading to.
- Rotate positions in the rabbit run as it's likely that the windward boats will round first.

POINTING

LEVEL: ★★★

OBJECTIVE

Learn to sail a high "mode" upwind without losing too much speed.

DESCRIPTION

At least two boats do a line-up upwind. The goals of the leeward boat (orange) is to pinch off the windward boat (blue) by sailing a little higher than normal. Once he/she succeeded, start over again. If the windward boat has no problem holding his/her lane, start over again as well.

TIPS

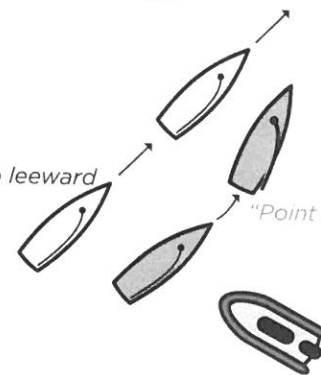
- Make pairs of sailors with similar boatspeed.
- Let them line-up less than 2 boat lengths from each other.
- Be careful that it does not become a luffing game. It should be close to a normal upwind sailing angle.
- Rotate positions between sailors, so each sailor gets to do every task.
- Talk about rig set-up and technique so sailors know what they are looking for.

WIND

"On port tack"

"Reacting to leeward boat"

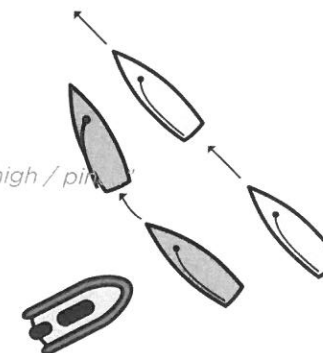
"Point high / pinch"



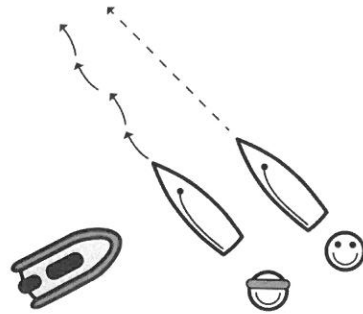
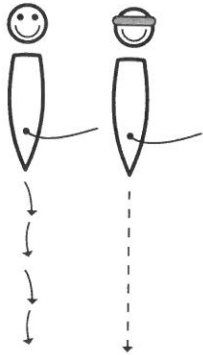
"On starboard tack"

"Point high / pinch"

"Reacting to leeward boat"



WIND



SAIL BLINDFOLDED

LEVEL: ★★★

OBJECTIVE

Increase feeling for the boat and learning to get a feel for speed by listening and feeling.

TIPS

- Explain the goal of this exercise
- Don't do this in windy weather
- Safety first!

DESCRIPTION

Do this exercise in pairs. One sailor is blindfolded and the other one is following. Let the blindfolded sailor practise on his own and minimize coaching. The other sailor is following for safety and tips. Start with straight courses and after which the intensity can be increased to sailing up/down courses.

POINTING & FOOTING

LEVEL: ★★★

OBJECTIVE

To be able to hold your lane upwind. Respond to attacks from other boats that try to pinch or roll you and to attack others yourself. This requires a lot of skill from the sailor. He/she should be able to sail the boat in different modes without losing too much speed or sailing too much extra metres.

TIPS

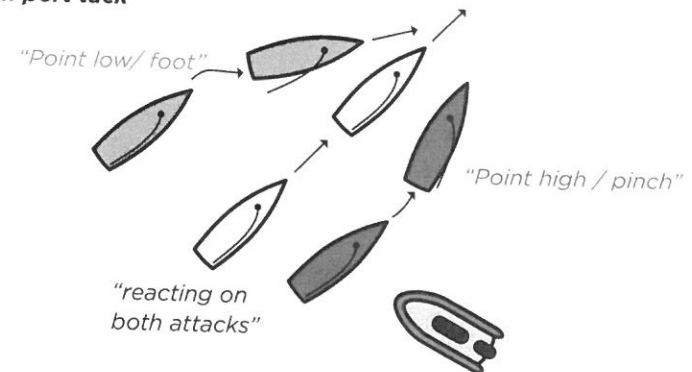
- The boats must be lined-up quite close to each other
- Rotate positions between sailors so every sailor gets to do every task
- Agree on a certain amount of time and reward the winner

DESCRIPTION

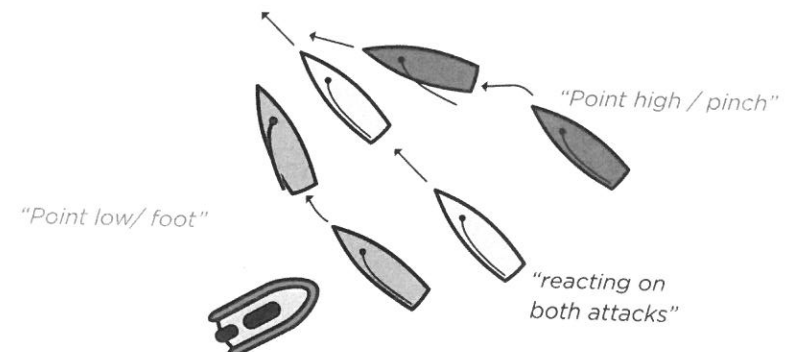
At least three boats start an upwind line-up. The boat on top (blue) needs to "roll" the boats below. The boat most to leeward (orange) must try to "pinch" the others. The boat in the middle needs to respond to both.

WIND

"On port tack"



"On starboard tack"



STRATEGY & TACTICS

Strategy & Tactics

In this chapter all drills are focussed on making choices on the racecourse. Some choices can be trained and will most of the times be the same. Other choices will be based more on experience in reading wind patterns and shifts.

In general we can define a difference between tactics and strategy.

- Strategy consists of choices based on wind patterns, shifts, pressure and set-up of the course. Basically: the fastest way around the course if you were alone.
- Tactical choices are choices based on the same elements as described above, but adding the element of other boats or a fleet. Basically: the fastest way around the course keeping other boats or the fleet into account.

Strategically we focus on 3 main questions to find a fast way around the racecourse:

1. Where is the pressure on the course?
2. What is the longer tack from my position on the course?
3. What is the lifted tack at the moment?

Tactically we focus on how we can answer these questions with other boats around us. The trick is to find your way through the fleet without getting distracted from your plan by the other boats around you.

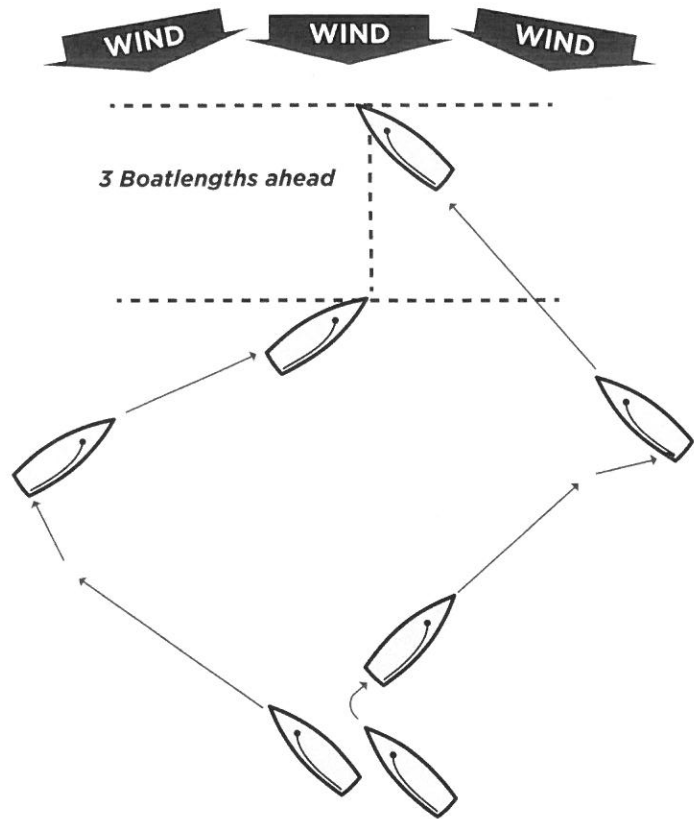
Depending on the conditions one question can be more important than the other. For example: when sailing in oscillating conditions, knowing what the lifted tack is is very important. When other boats or an entire fleet comes into play, answering these questions correctly and finding a clear lane starts becoming more difficult.

Using the drills in this chapter you can introduce sailors to making tactical and strategical choices. Most drills simulate real racing situations and therefore force sailors to make certain decisions they could also face during a race. The more they have to make these decisions, the more they can start anticipating situations based on experience.

Some tips:

- Try to let sailors do the drill, only give feedback afterwards instead of during the drill. This way you allow your sailors to actually make their own decisions.
- This chapter contains a lot of racing situations, make sure the sailors are focussed on executing the drills instead of winning the race. Enforce the idea that is fine to make mistakes as long as the sailors evaluate and learn from their mistakes.
- Video situations from the outside and use them in your briefings. Tactical and strategical situations look a lot different from a different perspective!





RECOGNIZING WIND SHIFTS

LEVEL: ★☆☆

OBJECTIVE

Learning to recognize wind shifts upwind and how much effect they have.

TIPS

- Make sure that both boats are equal in boatspeed
- Use this exercise in shifty conditions in which big gains/losses can be made in a short period of time.
- By using a compass, sailors can learn how to use it and check the results themselves.

DESCRIPTION

Two boats start on the same tack by lining up or with a rabbit/gate start. The windward boat is the leader and decides when he wants to tack. Once this boat tacked away, both boats continue sailing. When the leader tacks back, the other boat has to tack too. Measure the distance (in boatlengths) between the boats when the front boat crosses the other one. Let the sailors discuss what happened before they start the next one.

Ideally, the boat to windward tacks away when both get headed. He continues sailing on the lifted tack until he is headed again. The leader will sail two lifts and the other boat two headers (in an oscillating breeze).

DOWNWIND STRATEGY CHOICES

LEVEL: ★☆☆

OBJECTIVE

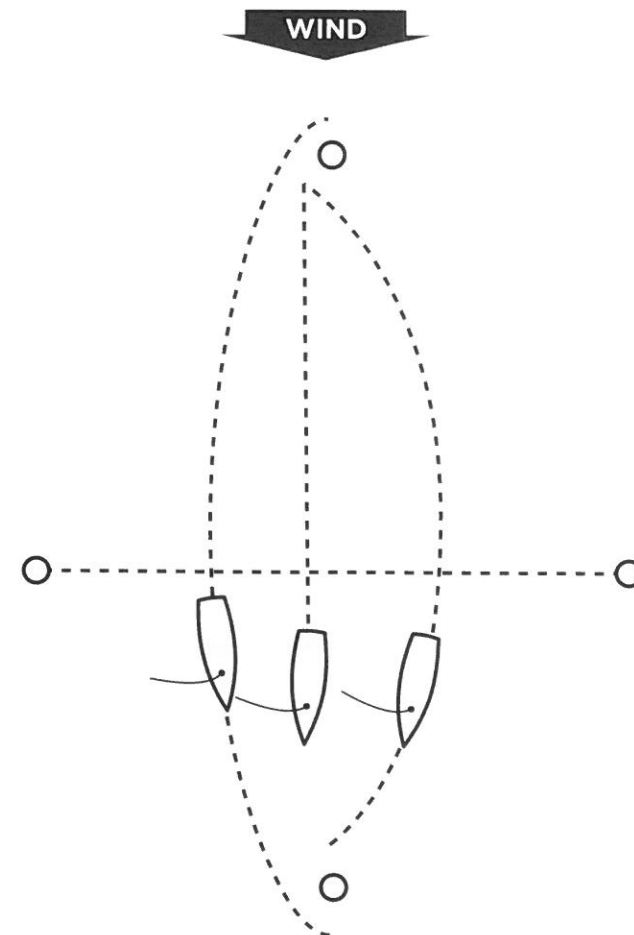
To learn how to identify a favoured side of a downwind run, based on pressure/traffic.

TIPS

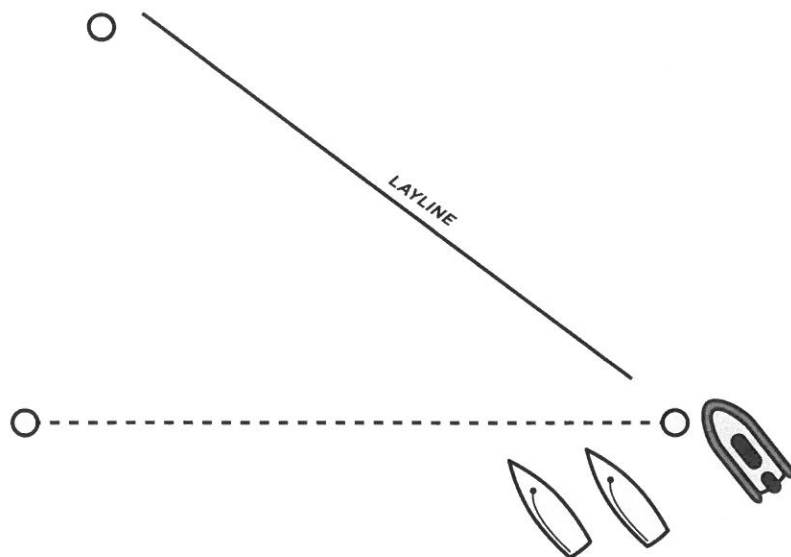
- Film wind coming down on the course and see if sailors can identify pressure on the course.

DESCRIPTION

Put in a start followed by a short upwind beat and a longer downwind run. Instruct sailors to make a choice for downwind positioning outside/middle/inside before rounding the windward mark.



WIND



MAKING LAYLINE START

LEVEL: ★☆☆

OBJECTIVE

To help sailors identify the layline and see how it changes by shifting winds

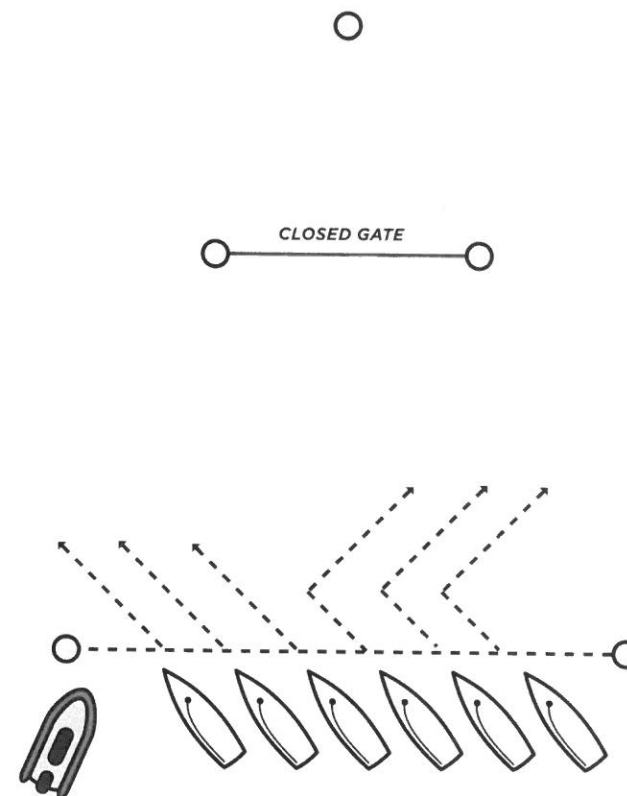
DESCRIPTION

Put in a relatively long starting line and a close windward mark. The aim for the sailors is to position themselves on the starting line in a way that they are immediately on layline.

TIPS

- By making the upwind beat longer this drill will become more difficult.
- Doing this drill on a location with shifty wind directions will change the position of the layline constantly.

WIND



CLOSED GATE IN UPWIND

LEVEL: ★☆☆

OBJECTIVE

Learning to recognize a favoured side of the upwind leg based on pressure, shifts or local effects.

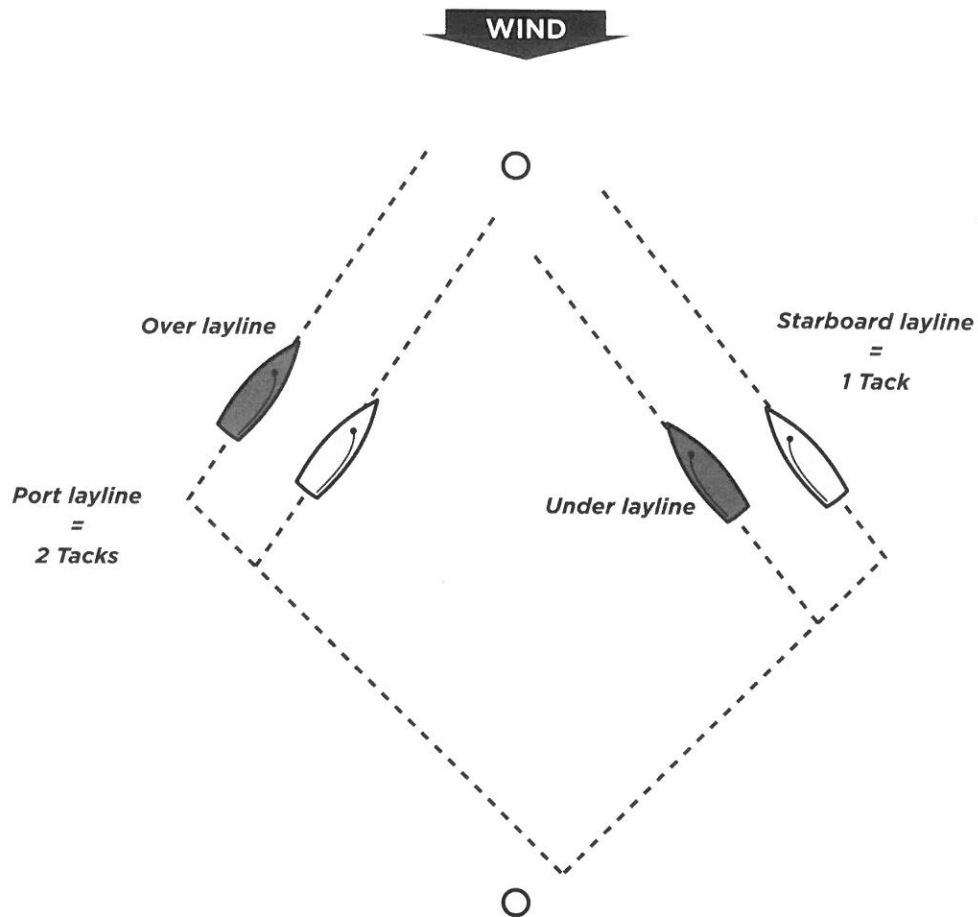
DESCRIPTION

In this drill the sailors need to pick a side to start and pick a side in the upwind leg. There will be a gate in the middle of the course which is closed. Sailors cannot go through the middle gate. If you start at RC end you cannot go left on the upwind leg. If you start at pin end you cannot go right in the upwind leg. Sailors need to pay attention to:

- Which side of the start is favoured?
- Which side of the upwind leg is favoured?
- Is there more pressure / better angle at one side of the course?

TIPS

- Ask sailors before the drill what their plan is to trigger them to look at pressure differences or differences in angle.
- Ask sailors after the drill if they sailed their race according to their plan or if they had to adjust their plan according to the conditions.



IDENTIFYING LAYLINES

LEVEL: ★☆☆

OBJECTIVE

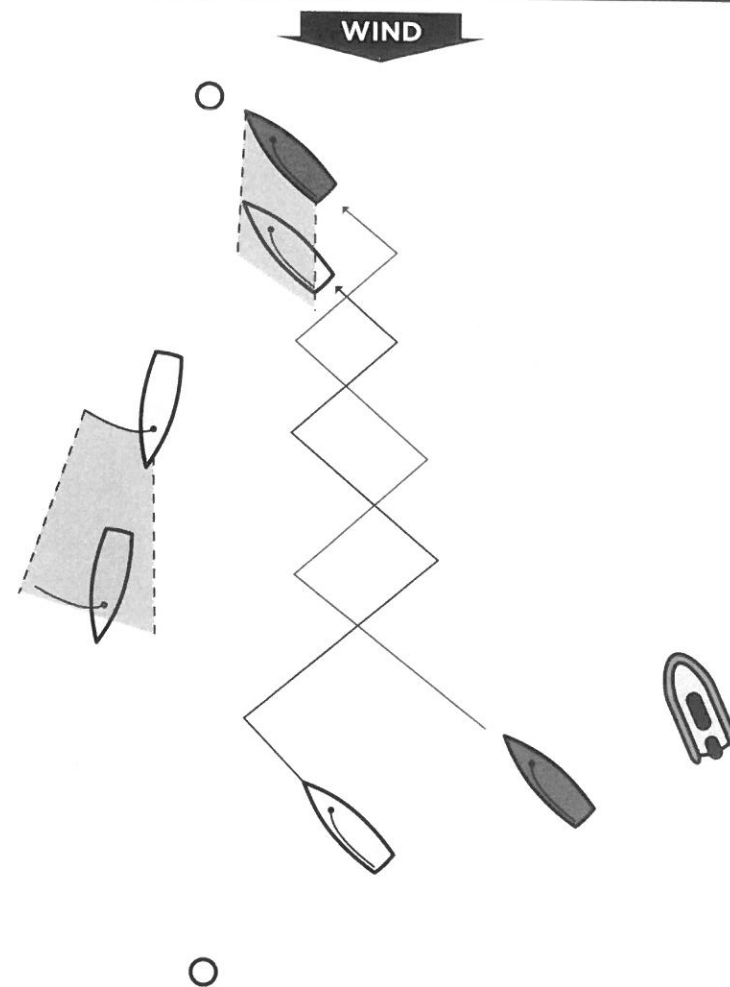
Learning to identify important aspects of the first beat. Is one side favoured? What are the conditions like?

DESCRIPTION

Put in a windward/leeward mark course. Have sailors sail the course and instruct them to make minimum tack directly on to the layline. Starboard layline = making 1 tack
Port layline = making 2 tacks

TIPS

- By making the course longer it will become more difficult to identify the layline.



DEFEND AND ATTACK EASY

LEVEL: ★☆☆

OBJECTIVE

Learn how to defend and attack. Sailors practise tacks in the meantime.

TIPS

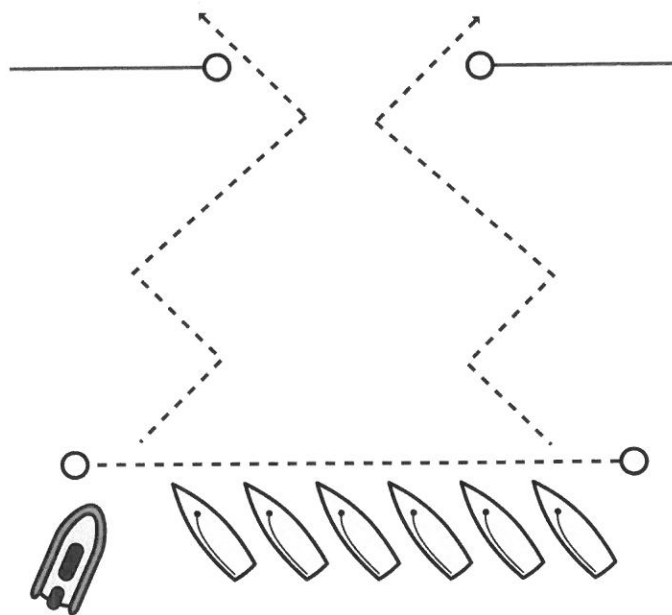
- Make sure sailors know the rules well (RRS 10 till RRS 17)
- Explain the difference between loose and tight cover

DESCRIPTION

Use a medium length windward-leeward course and make groups of two boats. Start at the leeward mark going upwind with a gate/rabbit start. The boat that leads has to defend his lead and round the top mark first. Same exercise downwind. Restart when there is too much separation between boats. The leader has to try to be first at the bottom mark. Switch positions every lap.



WIND



OPEN GATE IN UPWIND

LEVEL: ★☆☆

OBJECTIVE

Learn how to recognize a favoured side of the upwind leg to make a crossing.

DESCRIPTION

In this drill the sailors need to cross through a windward gate in the middle of the upwind leg. This forces them to make a crossing in the middle of the upwind leg and then choose how to continue their last half of the upwind towards the windward mark.

TIPS

- Ask sailors before the drill what their plan is to trigger them to look at pressure differences or differences in angle.
- Ask sailors after the drill if they sailed their race according to their plan or if they had to adjust their plan according to the conditions.

DOWNWIND GATE CHOICE

LEVEL: ★★☆☆

OBJECTIVE

To learn sailors how to pick the correct leeward gate mark.

TIPS

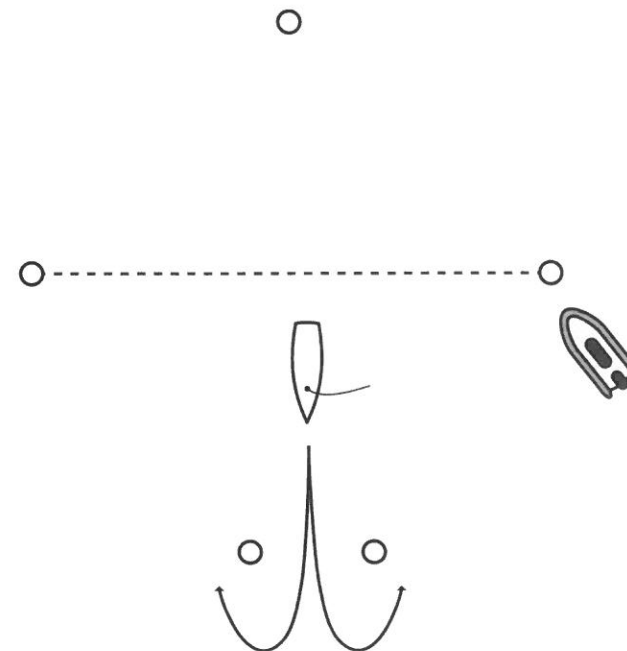
Vary the drill by changing these elements:

- Change gate size: wide gate or small gate.
- Change gate bias: left favoured/right favoured

DESCRIPTION

Put in a starting line and a short upwind beat. After rounding the windward mark, sailors will pass the starting line on the run and will sail towards a leeward gate. Instruct sailors to make their gate choice based on bias, traffic and wind changes.

WIND



CONTROLLING THE FLEET

LEVEL: ★★★☆

OBJECTIVE

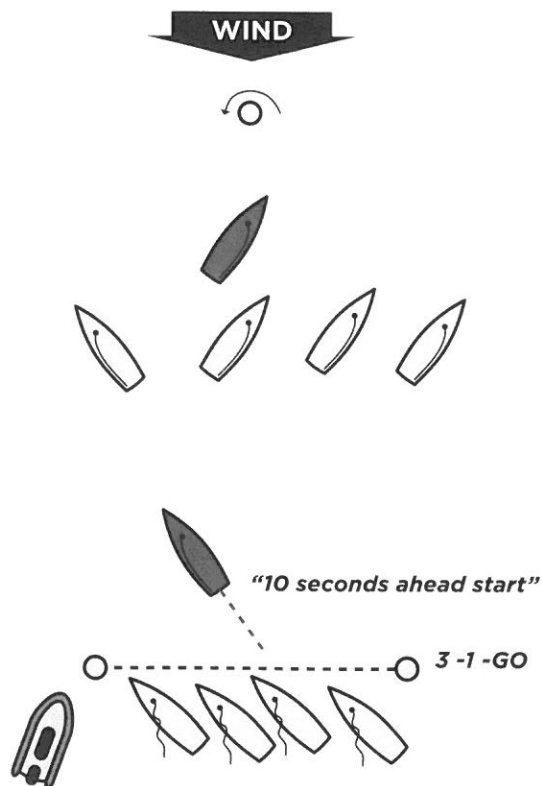
Learning to defend and control while leading the fleet.

DESCRIPTION

1 sailor (green boat) gets a 10 second lead, starting earlier than all other boats in the fleet. This sailor needs to keep his lead by defending the other boats trying to pass him. One of the ways to do so is by staying between the windward mark and the opponents.

TIPS

- Make the lead bigger or smaller depending on the skill level of the leading sailor.
- This exercise is easier in stable breeze than in shifty breeze. Make the drill more difficult by doing it in shifty conditions.



PICK A SIDE UPWIND

LEVEL: ★★★

DESCRIPTION

Use a medium length windward-leeward course and make groups of two boats. Start at the leeward mark going upwind with a gate/rabbit start.

The boat that leads has to defend his lead and round the top mark first. Same exercise downwind. Restart when there is too much separation between boats.

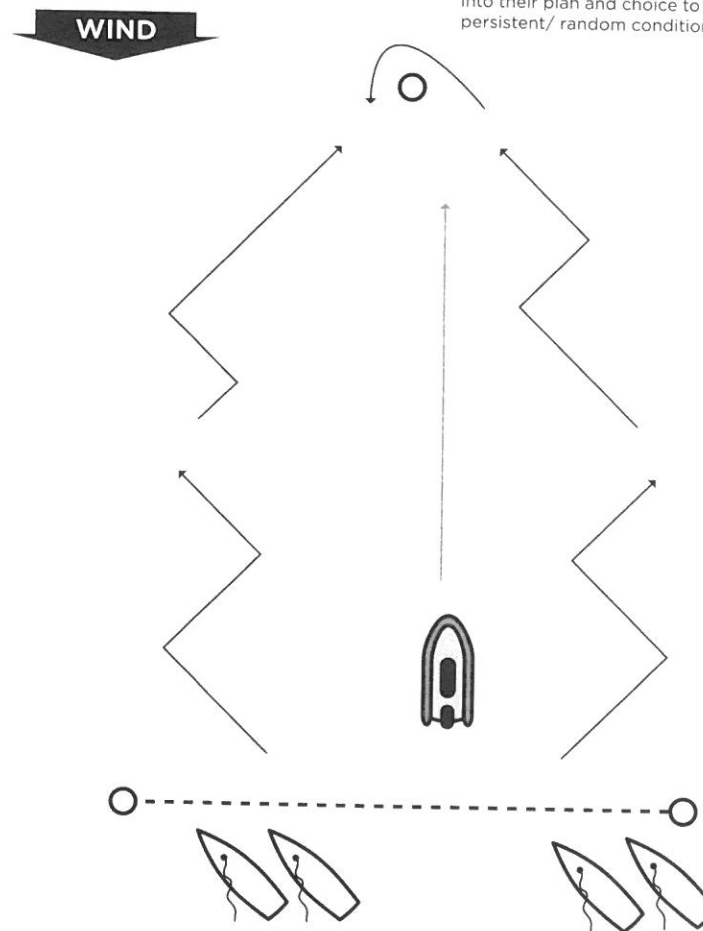
The leader has to try to be at the bottom mark first. Switch positions every lap.

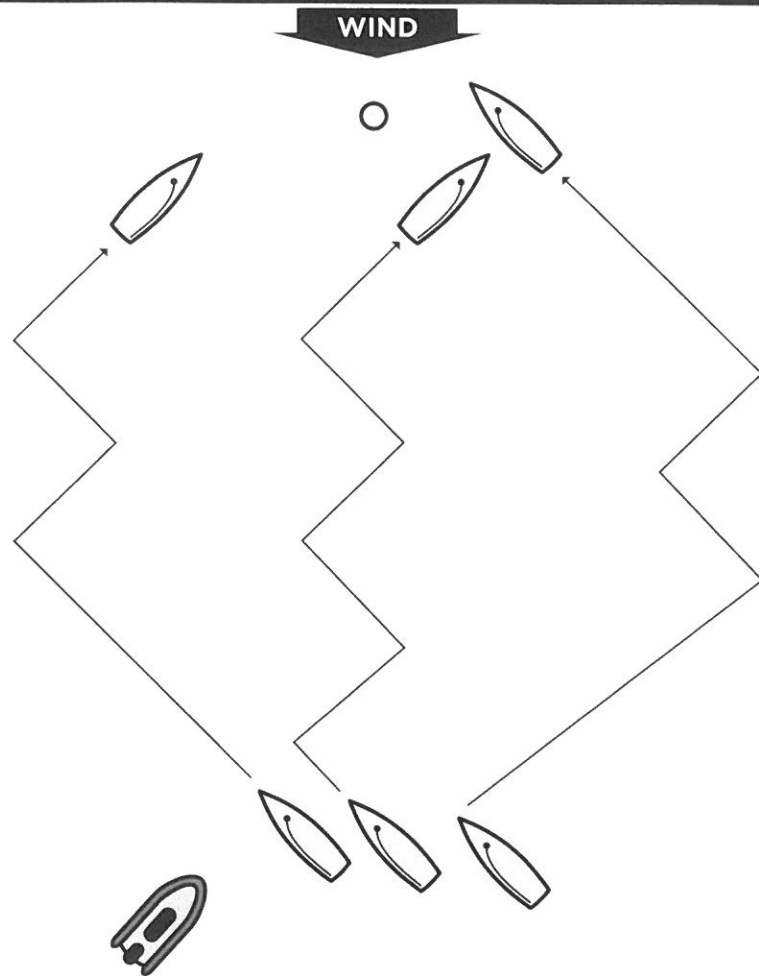
OBJECTIVE

Learning to shift pick a side of the start and upwind and work that side until crossing to get to the upwind mark.

TIPS

- It is easy to coach sailors while driving the coachboat upwind with them, indicating the middle boundary.
- Tell sailors who start on the RC side of the line to be aware of the quickly upcoming middle boundary going on starboard. They can use that to ask for room for an obstacle.
- Tell sailors to pay attention to the wind and to work that into their plan and choice to pick a side (oscillating / persistent / random conditions).





SAILING A TEST BEAT

LEVEL: ★★★

OBJECTIVE

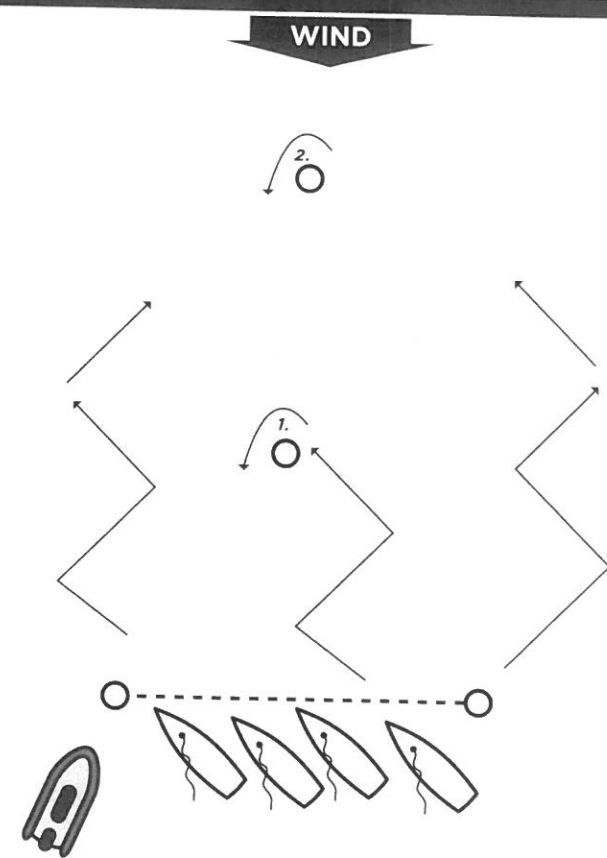
Learning to identify important aspects of the first beat. Is one side favoured? What are the conditions like?

DESCRIPTION

Sail upwind with at least three boats. One boat will go left, one right and the one in the middle can choose what he/she wants. Sailors sail their side of the course towards the first mark. At the top they'll see who is in front and how much distance is between them. They discuss with all three (and maybe the coach) what happened and what could be the causes.

TIPS

- Make sure that both boats are relatively equal in boatspeed.
- Follow the boats from the coachboat to be able to give your feedback.
- Measure the wind direction several times to give "facts" besides experiences of the sailors
- Ask sailors what they think about the breeze before starting the beat and compare that to their analysis after they have sailed the beat.



SHORT COURSE/LONG COURSE

LEVEL: ★★★

OBJECTIVE

Learning to shift focus from short course racing and concentrating more on boat-to-boat positioning to focussing more on long course racing and concentrating on strategy, pressure and shifts.

TIPS

- It is easy to cater for sailors of different level in the same group by focussing on the difficult elements for the experienced sailors and focussing on easy elements for the less experienced sailors.

DESCRIPTION

Sailors sail to mark 1 (closest one) first. This mark will be quite close so the focus will be more on boat positioning and not getting pushed over layline. After rounding mark 1, sailors sail downwind towards the start which will function as a gate. After rounding the gate, sailors sail towards mark 2 (furthest one), the focus will now be more on strategy and seeing where the shifts and gusts are.

This drill combines short course racing with long course strategy and is a good way to put more pressure on sailors in one exercise.



WINDWARD MARK APPROACH

LEVEL: ★★★

OBJECTIVE

Learning to sail your own race and to make your own decisions without being forced by other boats.

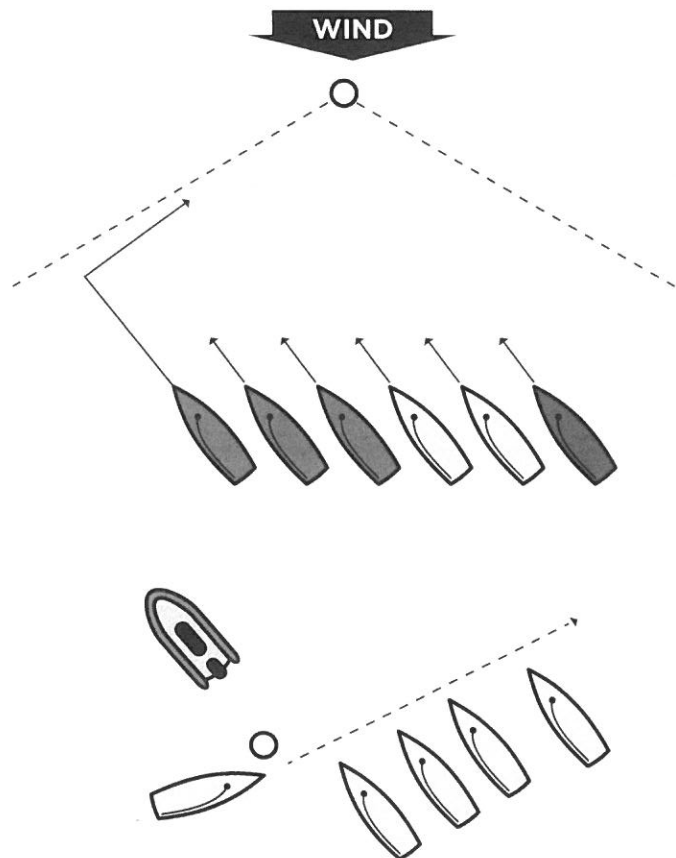
TIPS

- Make sure to address the rules to the sailors before doing the exercise to avoid collisions
- Do this exercise with a more advanced group of sailors who know to shift gears and pinch without losing too much speed.
- To increase difficulty shorten the course, this will force sailors to act quickly
- Make sure that sailors rotate positions.

DESCRIPTION

Put a relatively short windward/leeward course in. Start the exercise with a gate start at the leeward mark on starboard tack. The boat running the gate-start tacks to starboard once he passed all boats. He is now the most windward boat (green) on starboard tack and should be able to push boats that are to leeward over the port layline. Boats to leeward (red) have to make sure they do not get pushed outside of the laylines. To do so they have several options:

- Pinching off the boat to windward to force him to tack and create a gap to windward.
- Going in a faster/lower mode and try to cross boats to windward in front well before reaching layline.
- Tacking and ducking behind boats to windward and reposition on the righthand side of the course to get a starboard tack advantage at the top mark.



ARGENTINA

LEVEL: ★★★

OBJECTIVE

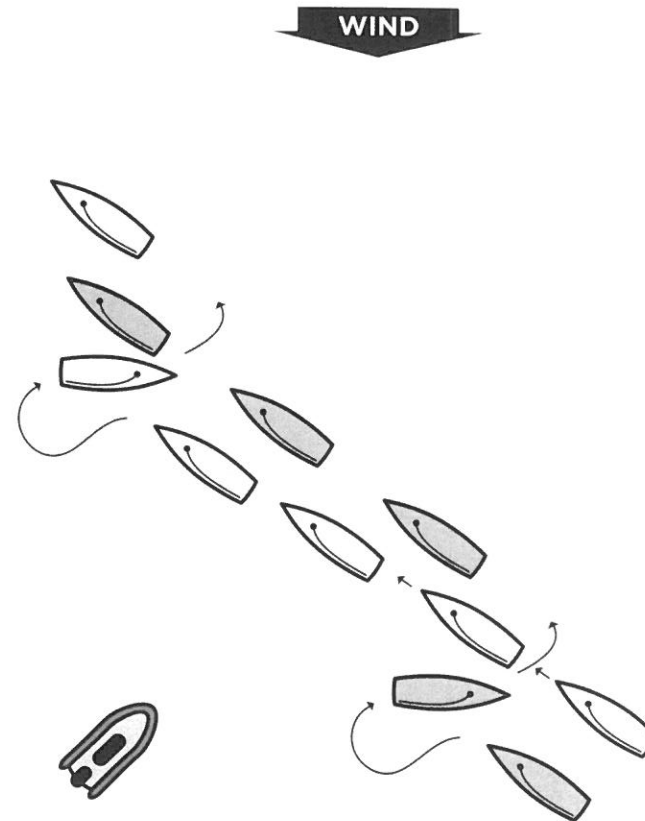
To gain control out of a leeward position.

DESCRIPTION

Two boats sail upwind on starboard tack. The leeward boat (green) bears away until he/she can duck the windward boat at full speed. After the duck this boat sails 2 boatlengths before he/she tacks again. With technical well-executed tacks the new windward boat should be in control of the other boat, because he/she is unable to cross safely.

TIPS

- Make sure sailors know the rules well (RRS 10 till RRS 17).
- Explain the difference between loose and tight cover



FINISH APPROACH

LEVEL: ★★★

OBJECTIVE

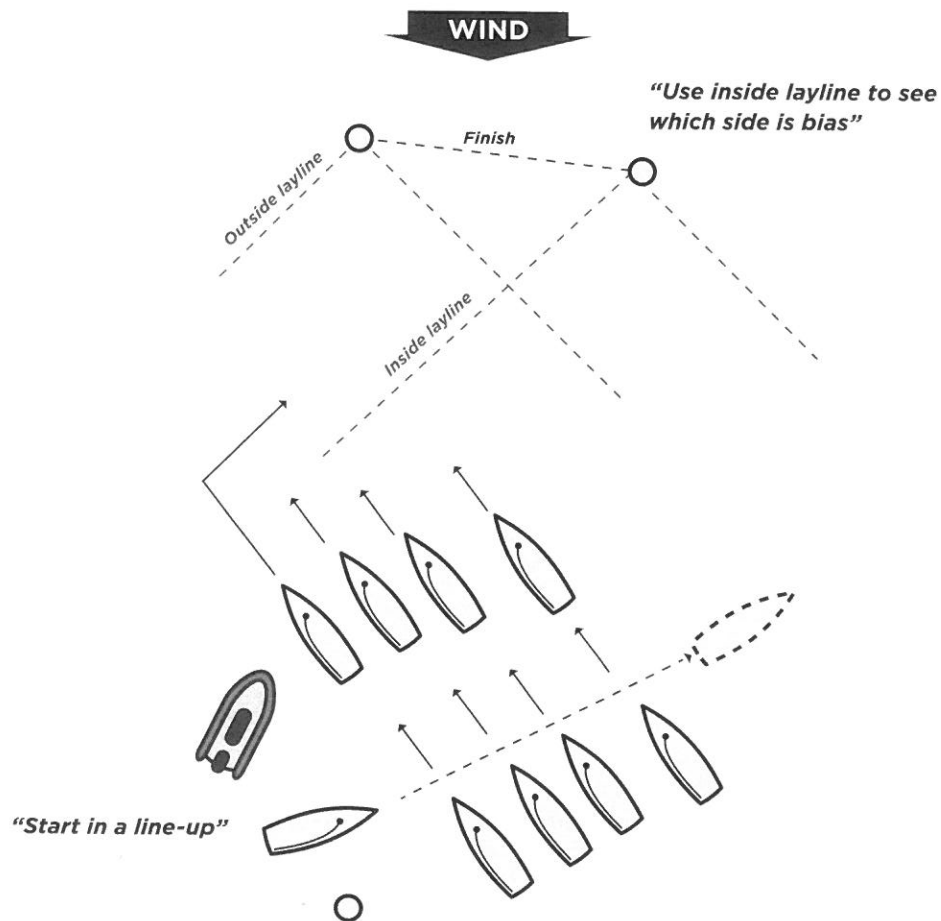
Learning to spot the right side of the finishline and positioning yourself in a way that you have multiple finishing options and selecting the best one.

DESCRIPTION

Put in a leeward mark and a windward finish, making one side of the finishline biased. Sailors will start at the leeward mark in a gate-start and sail an upwind leg towards the finish line. Some sailors will be forced to sail past the inside laylines missing the opportunity to finish on the correct side of the line.

TIPS

- Make sure to address the rules to the sailors before doing the exercise to avoid collisions.
- Do this exercise with a more advanced group who know to shift gears and pinch without losing too much speed.
- To increase difficulty, change biased side of the finish line every now and then to motivate sailors to actively find out which side is biased.



LEEWARD MARK APPROACH

LEVEL: ★★★

DESCRIPTION

In this drill the sailors start with a reach-start and have to go around a reachmark first before going downwind towards the leeward mark. This stretches the fleet out a little bit to avoid big groups of boats and major chaos. It is also important to focus on boatspeed during the downwind leg and trying to get a inside boat advantage. While approaching the leeward mark sailors need to ask themselves the following questions:

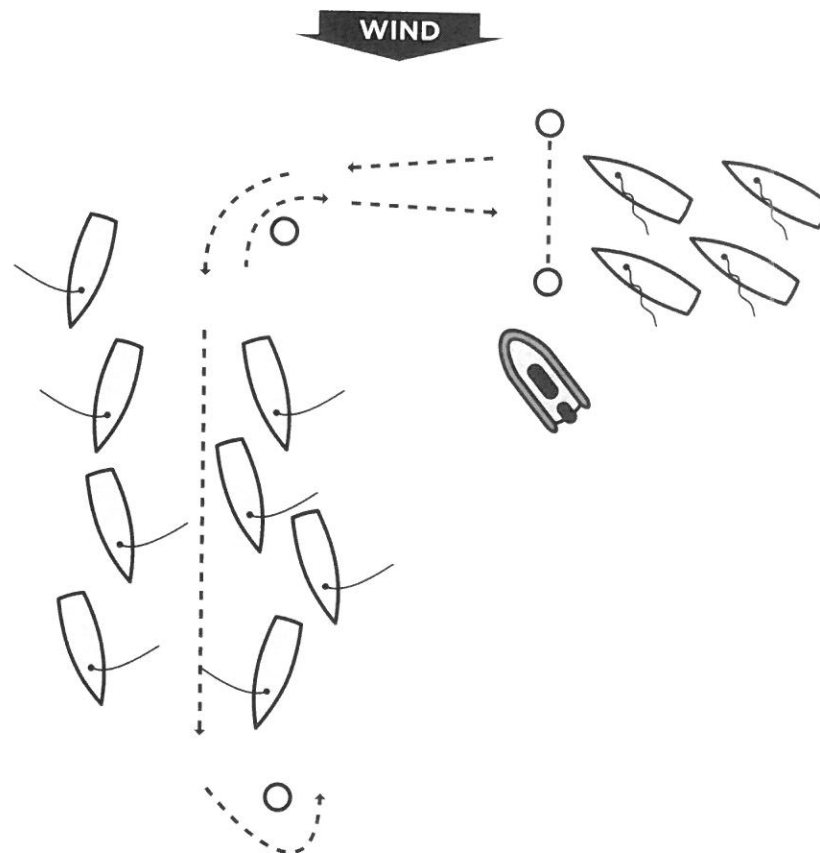
- Am I in a good position now to round the leeward mark?
- Am I overlapped with the boats next to me?
- Do I need to make room for someone on the inside?

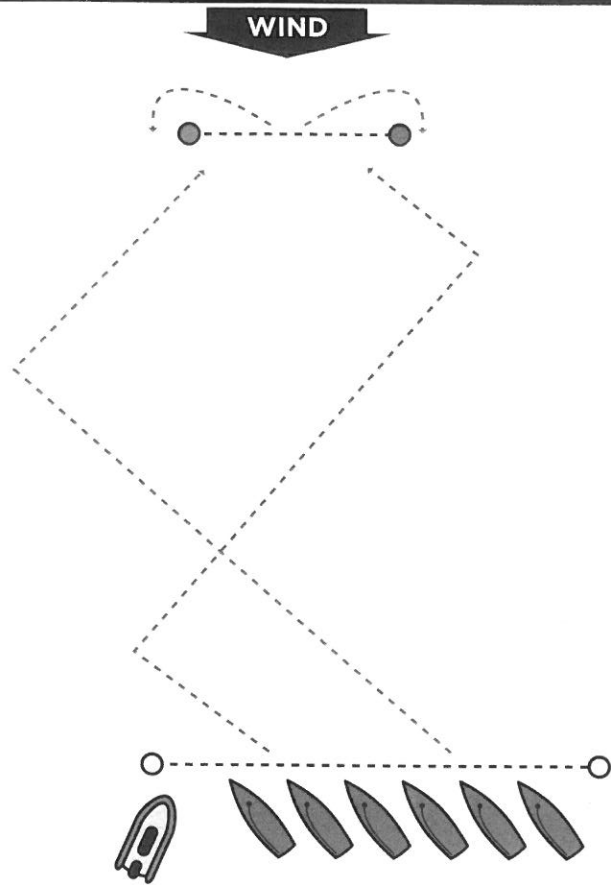
OBJECTIVE

Learning to position yourself well for a leeward mark rounding, using the inside boat advantage.

TIPS

- It is important to explain rule 18 and the concepts of "overlap" and "zone" from the RRS.
- Make sure that all sailors are clear on do's and don'ts such as: No crashin in to each other.
- Boat to boat positioning will be very important and verbal communication with your opponents is a key element.





WINDWARD GATE CROSS-OVER

LEVEL: ★★★

OBJECTIVE

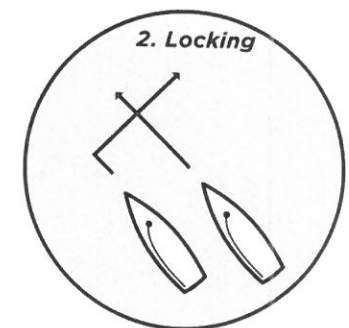
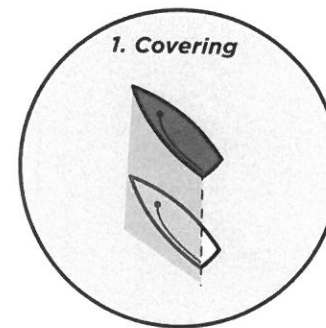
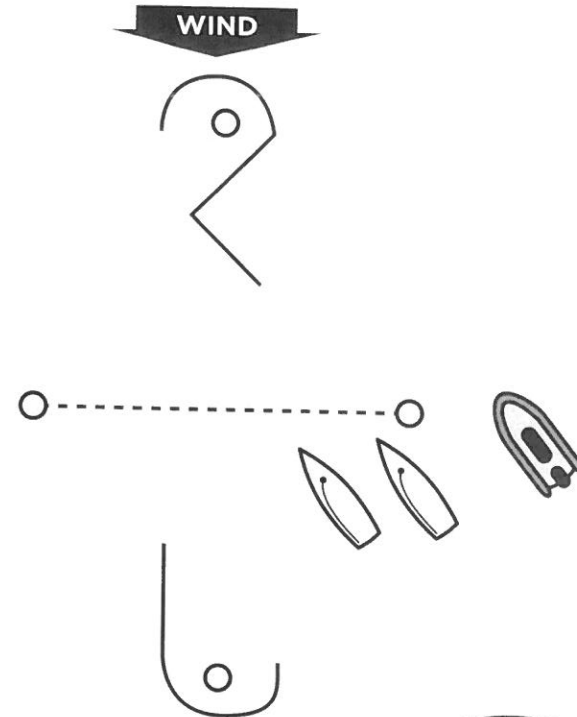
Learn how to cross over from a biased side of the starting line to a favoured side of the upwind leg.

DESCRIPTION

Choose a group of sailors who have to start on the RC side of the line and cross over to the left side of the course to go round the left windward gate. Choose a group of sailors who have to start on the pin end side of the line and cross over to the right side of the course to go round the right windward gate. This simulates that in some races in which one side of the line might be good and the other side of the upwind leg might be good, so sailors need to cross fairly early in their upwind leg and work their way to the favoured side of the course.

TIPS

- Tell sailors to not let them be pushed by the fleet to the side of the course they do not want to be on.
- Film at least once from the left side of the course and once from the right side of the course.
- Tell sailors to ask themselves the following questions during racing:
 - 1) What tack do I want to be on after the start?
 - 2) Do I need a windward gap or a leeward gap on the starting line?
 - 3) Do I want to position myself windward or leeward to the fleet on the starting line.



1 ON 1 MATCHRACE

LEVEL: ★★★

OBJECTIVE

Learning and improving boat-to-boat positioning. Getting to know to know covering and locking.

DESCRIPTION

Put in a short windward/leeward course. Give one-on-one starts and instruct sailors to matchrace. Make sure that sailors are aware of ways to control the other boat by covering/locking.

TIPS

- Only do this drill when sailors are aware of RRS rules and teamrace/matchrace appendices.
- Emphasize that this drill is to learn to control another boat and not to win the race by using RRS.

DEFEND AND ATTACK ADVANCED

LEVEL: ★★★

DESCRIPTION

Start the exercise with a rabbit/gate start. When the rabbit tacks after crossing the last boat, this boat will normally be in the lead. The objective of the leading boat (green) is to defend all opponents and stay in the lead. The leader has to decide which boat to defend by using tools as tightcovering, loose covering and controlling boats behind him/her.

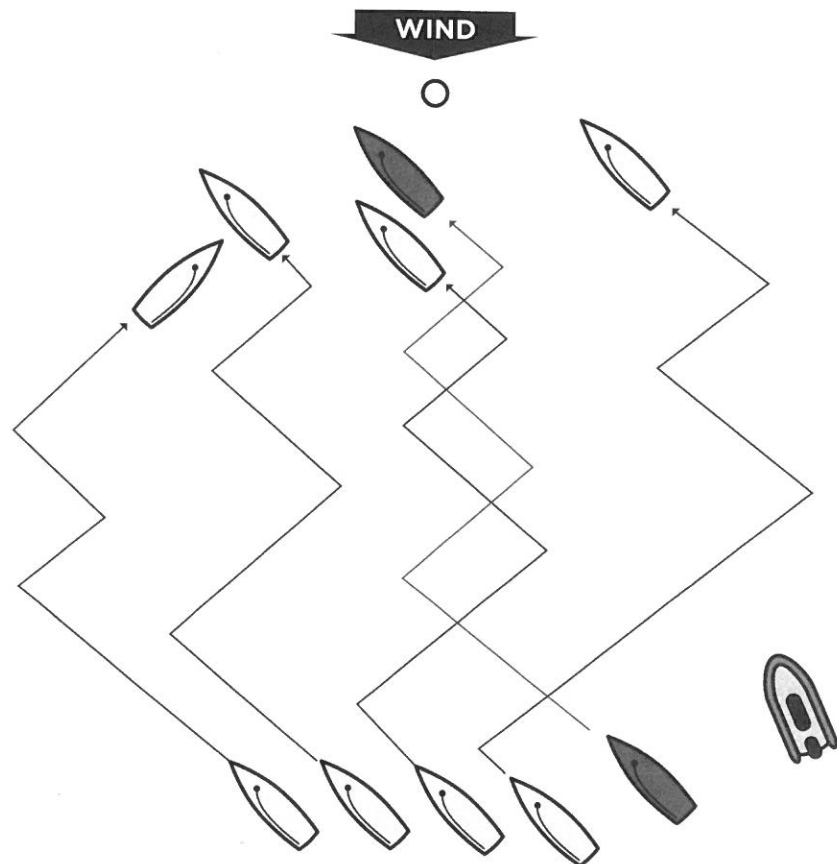
In the meantime the other boats are working together as a team to challenge the leader by sailing into both corners of the upwind leg and boats in the middle trying to start a tacking duel. Communication between boats is allowed. This means that the objective of the other boats is to attack the leader. Some boats may duck the leader, others continue or try to pinch him/her. Once one of the attacking boats crosses in front of the leader, this boat is the new leader. The old leader can now be an attacker. Start over again if boats get too far apart from each other.

OBJECTIVE

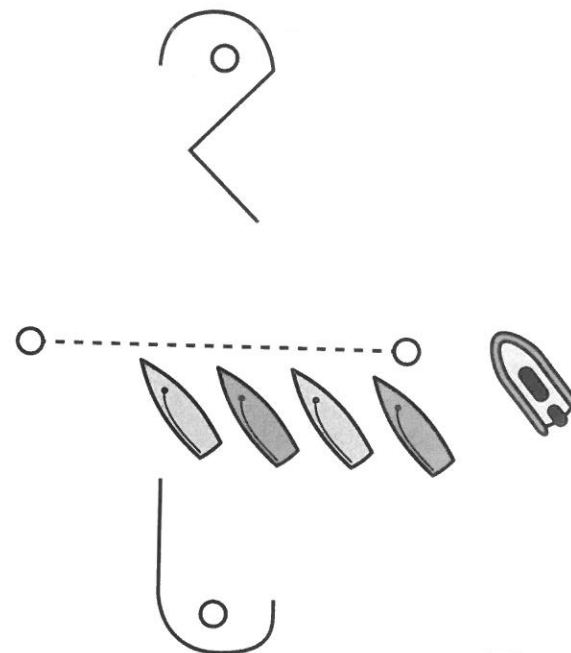
Learn how to defend and attack. Sailors practise tacks in the meantime.

TIPS

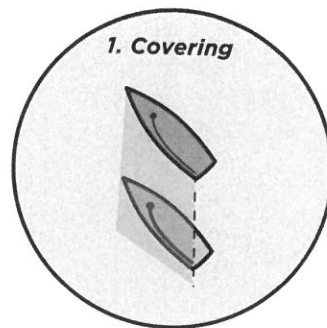
- Make the lead bigger or smaller depending on the skill level of the leading sailor.
- This exercise is easier in stable breeze than in shifty breeze. Make the drill more difficult by doing it in shifty conditions.



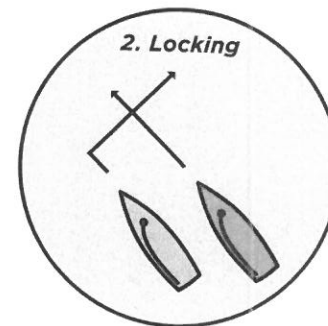
WIND



1. Covering



2. Locking



2 ON 2 TEAMRACE

LEVEL: ★★★

OBJECTIVE

Learning and improving boat-to-boat positioning. Getting to know to know covering and locking.

DESCRIPTION

Put in a short windward/leeward course. Make teams of two and instruct sailors to teamrace. Make sure that sailors are aware of ways to control a boat from the other team by covering/locking.

TIPS

- Only do this drill when sailors are aware of RRS rules and teamrace/matchrace appendices.
- Emphasize that this drill is to learn to control another boat and not to win the race by using RRS.

STARTING



Elements to a good start.

To become a good starter it's important to break up the starting procedure into smaller elements. Each element is equally important and deserves the same amount of training and attention. We have divided starting into 6 elements. All of the exercises in this chapter are dedicated to practise 1 or more of these elements. Get all of them right in one start and it will be a lot easier to make consistent good starts!

Good technique

You need to be able to control your boat in all sorts of conditions. Keep it in the same spot, S-turning to defend your place on the line and accelerating off the line so you can start your race in a clear lane.

Line transit awareness

It's critical to know where the line is and what your position is to the line. This way, you know if the fleet is lined up in a line-sag or if the fleet is pushing the line and therefore whether you need to accelerate early or late. There are several ways of determining the position of the line. Here are two examples:

- Finding a point on land as a reference: use both marks and try to find a reference point on land in the same line of sight. It's even better to get a few extra points of reference to create a "frame" of reference while sailing from the RC side of the line towards the pin-end. This way you know how your transit changes when your position on the line changes.
- Checking angles: When you are on the line, look towards RC end of the line and to pin-end side of the line. If you are looking with windward angles towards both RC and pin-end side, you will be under the line. In case you are looking to leeward to see both pin-end side and RC side of the line, you are over the starting line. The more open your angles the closer you are to the line. This way of getting a reference of where the line is is definitely less accurate but has the advantage that it can be done at any time in the starting procedure.

Line bias awareness

It is important to always know if one side of the starting line is more favoured than the other. There are several ways to check if one side is more favoured than the other but one of the easiest ways is to make a practise start at either pin-end or RC and check the angle you are leaving the line at. If you are sailing in a tight angle off the line you are on the favoured side of the starting line. In case you are sailing parallel to the line, the other side of the line is most likely biased.

Plan

Another thing you should know is that you have two options to leave the starting line:

- Continue on starboard
- Tack onto port as soon as possible

It's important to think ahead about what your plan will be after the start and on what tack you want to leave the line. That way you can defend either a leeward gap (in case of starting on starboard) to make it easier to hold your lane, or defend a gap to windward (in case you want to tack onto port as soon as possible) so you will have some space to tack.

Fleet tendency & fleet awareness

Another important factor on the starting line is the boats around you. How a fleet behaves can be predicted in some situations. We make a distinction between two types of fleet movement on a starting line:

- Fleet movement between port-end of the line and starboard-end of the line.
- Fleet movement to windward or leeward of the line.

In some cases we can predict behaviour or tendencies of a fleet of boats moving more towards one side of the line.

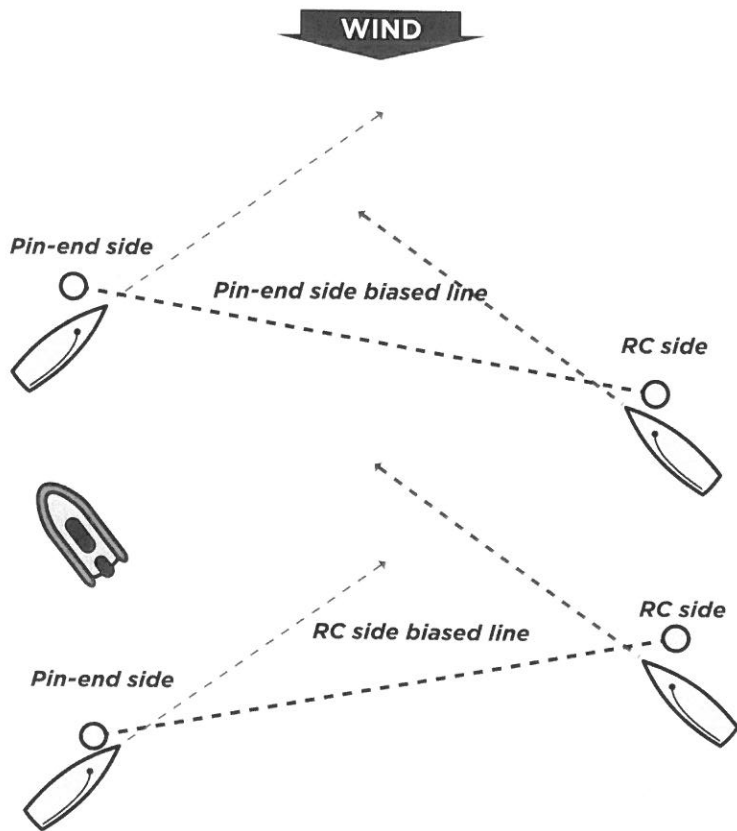
For example: when one side of the line is a lot more favoured than the other and it's very clear to see, most boats in the fleet will be pushing that side of the line.

In other cases we can even predict if the fleet will be lined up high on the line (more to windward) or if a fleet will be lined up further away from the line (more to leeward). For instance: if RC starts with P-flag and there is little breeze the fleet is more likely to be lined up high and pushing the line because there are less factors pushing them down (wind/waves/current) and there is little risk of being OCS (P-flag).

Another example can be with a lot of wind and bigger waves and when RC is using Black-flag, the fleet will be more likely to line up in a line-sag because there are more factors pushing the fleet down (strong wind / waves) and there are high consequences at 1-minute like getting a BFD (Black-flag).

Time & Distance

Last but not least it is important to know how much distance you will cover and how much time it will take to get to top-speed and therefore your position compared to the line needs to be to allow yourself to do so.



LINE BIAS

LEVEL: ★☆☆

OBJECTIVE

Learning how to find out which side of the starting line is biased.

DESCRIPTION

Make pairs of 2 sailors and have one sailor start on RC side and the other on pin-end side of the line.
If the boat from pin-end crosses in front, pin-end side of the line is biased. If the boat from RC crosses in front, RC side of the line is biased.

TIPS

- Change the biased side of the line a few times when sailors are sailing a beat. This will make sure they have to test over and over again.
- Changes in angle (wind shifts) will have a major effect on which side of the line is biased. Tell sailors to keep an eye on wind shifts.

STARTING TECHNIQUE

LEVEL: ★☆☆

OBJECTIVE

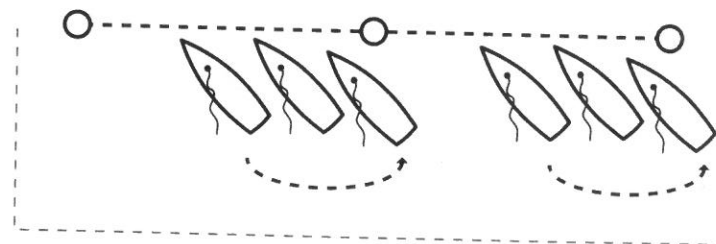
Learn how to keep the boat in the same location. Learn technical starting skills and learning to implement them on the starting line.

DESCRIPTION

Make small groups of maximum three sailors. Sailors need to stay as close as they can to the RC end of the starting line without being outside of the starting box (indicated in red). Focussing on technical skills on how to keep the boat in the same place as long as possible. In case the any of the sailors loses its position too much or drifts too far away, gybe around and reposition next to the mark.

TIPS

- Do rolling starts, sailing a beat every 3rd start. This makes them practise acceleration as well and gives the sailors a chance to sail instead of being in the same place all the time.
- Video tape the technical aspects of staying in the same place.



MYSTERY START

LEVEL: ★☆☆

OBJECTIVE

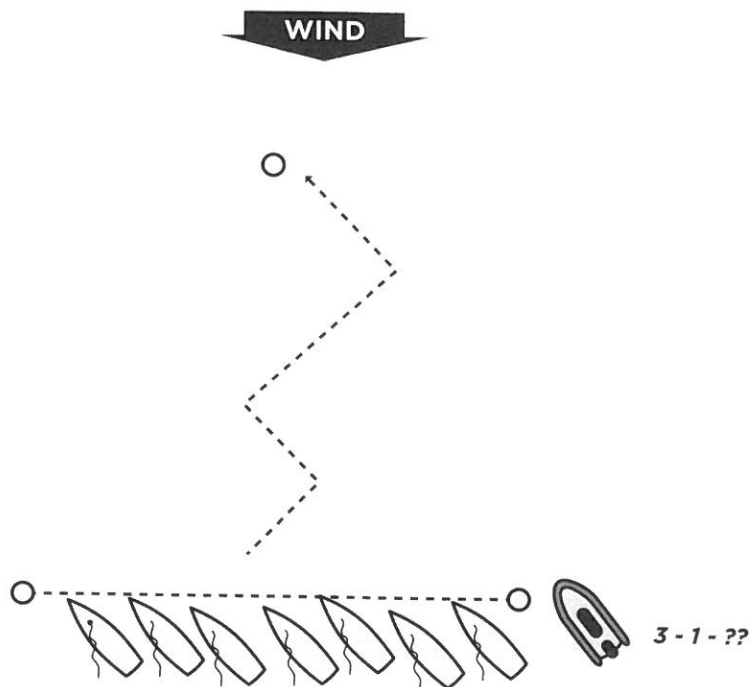
To make sailors aware that they have to be inside the starting box in the last minute before the start.

TIPS

- Make sure to address the rules to the sailors before doing the exercise to avoid collisions
- Do this exercise with a more advanced group of sailors who know how to shift gears and pinch without losing too much speed.
- To increase difficulty shorten the course. This will force sailors to act quickly.
- Make sure sailors rotate positions.

DESCRIPTION

Put in a normal size starting line and instruct sailors that the starting signal can be given **at any moment**. This forces them to stay to close.



NO TACKING LAST MINUTE

LEVEL: ★☆☆

OBJECTIVE

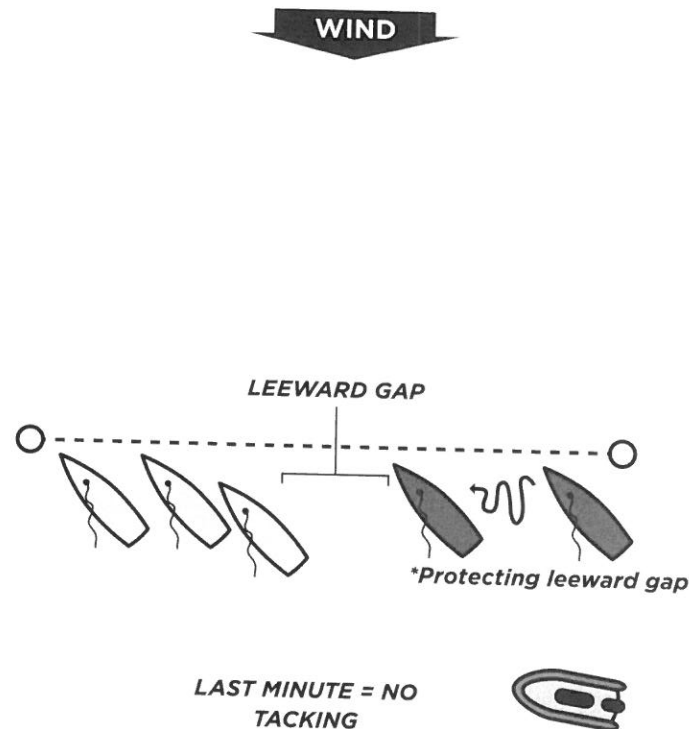
To make sailors aware of their need for a leeward gap and to improve ability to maintain a leeward gap.

TIPS

- The smaller the line, the more crowded the line will be and the more difficult this drill will become.

DESCRIPTION

Put in a normal size starting line. Instruct sailors that it's illegal to tack (or gybe) in the last minute of the starting sequence. Sailors should use their technique to create and/or hold a leeward gap.



ROLLING STARTS

LEVEL: ★☆☆

OBJECTIVE

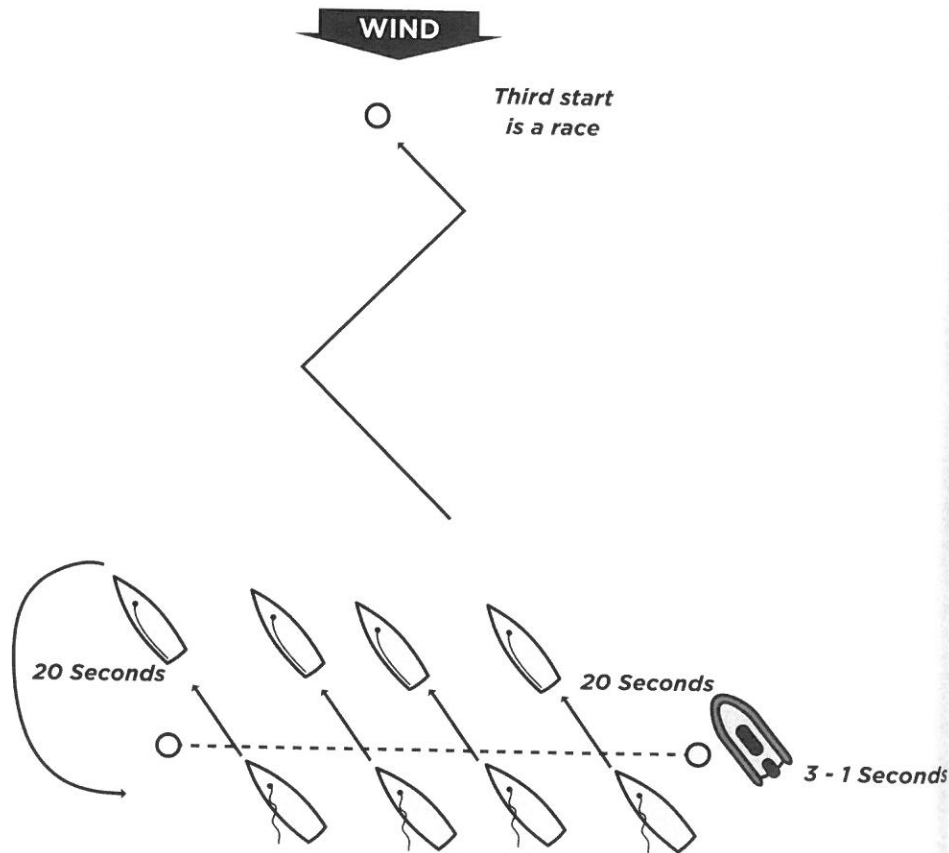
To do multiple starts in a row with limited preparation time. Sailors learn to improve their starts under pressure.

TIPS

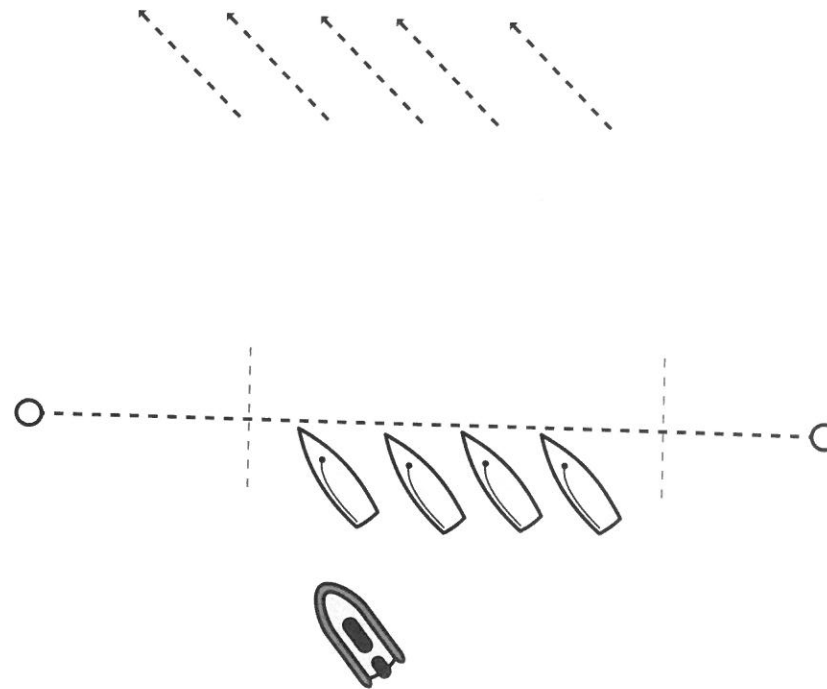
- Differentiate by letting sailors sail longer or shorter races, thus varying their preparation time for the next start.

DESCRIPTION

Put in a starting line and a medium sized upwind beat. Give a three minute starting sequence. After every start let the sailors sail for about 20 seconds before calling them back. Third start is a race to the windward mark.



WIND



LINE TRANSIT

LEVEL: ★☆☆

OBJECTIVE

Learning to make a line transit and knowing your position compared to the line using several bearing skills.

TIPS

- Change the biased side of the line once in a while to make sure sailors make a new transit every time they do the drill.
- Make the line longer to make the drill more difficult, make it shorter to the drill easier.

DESCRIPTION

It is of great importance to know your position compared to the line. You need to know if you are on the starting line, over the starting line or underneath the starting line to make a good start. Have sailors start in the middle on a long starting line, they will need to get a feel for if they are over, on- or underneath the line. There are a few ways to check your position compared to the line:

1. pick a few points on land as a reference. Position yourself on the right side of RC, look over both the RC- en pin end marks and see what point on land you can use for reference.
2. Check your angles compared both pin end and RC, an open angle means you are close to the line. A closed angle means you are under the line.

STARTING BOX

LEVEL: ★★★

OBJECTIVE

Train other starting approaches than the 'normal starboard approach'. Sailors practise their pre-start lay lines, time-on-distance skills, boat handling and racing rules.

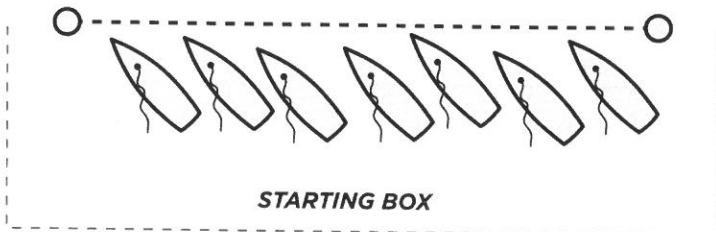
DESCRIPTION

Sailors need to stay inside the "starting box" during the entire pre-start. This forces them to manoeuvre a lot inside the starting box and also forces them to fight for their position on the starting line early.

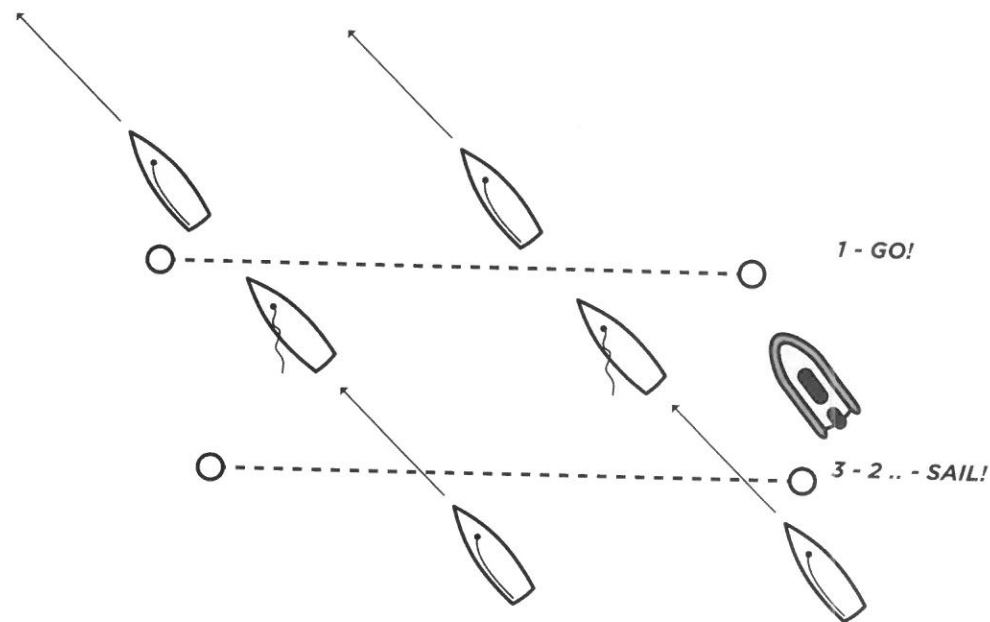
TIPS

- Do rolling starts, sailing a beat every 3rd start. This makes them practise acceleration as well and gives the sailors a chance to sail instead of being in the same place practicing starts all the time.
- Begin with a larger "box" and make it smaller as you go.
- Video tape the technical aspects of staying in the same place.

WIND



WIND



START LINE APPROACH

LEVEL: ★★★

OBJECTIVE

To learn how to control speed while approaching the starting line and to learn how to determine at what distance to stop.

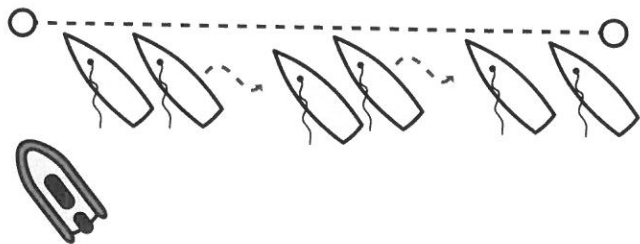
TIPS

- The fleet should keep at least one boat-length away from the starting line to allow themselves some space to accelerate.

DESCRIPTION

Put in a double starting line. The windward starting line must be no more than 20 seconds sailing from the leeward starting line. Give a 3 minute warning signal. Sailors can leave the leeward line at 1 minute before start and have to sail towards the second line. They need to control their boatspeed and distance and can start from the "real" starting line at 0-seconds.

WIND



DOUBLE TACK ON STARTLINE

LEVEL: ★★★

OBJECTIVE

Learning to defend a leeward gap by doing a double tack on the starting line and learning when it is a good moment to do a double tack on the starting line.

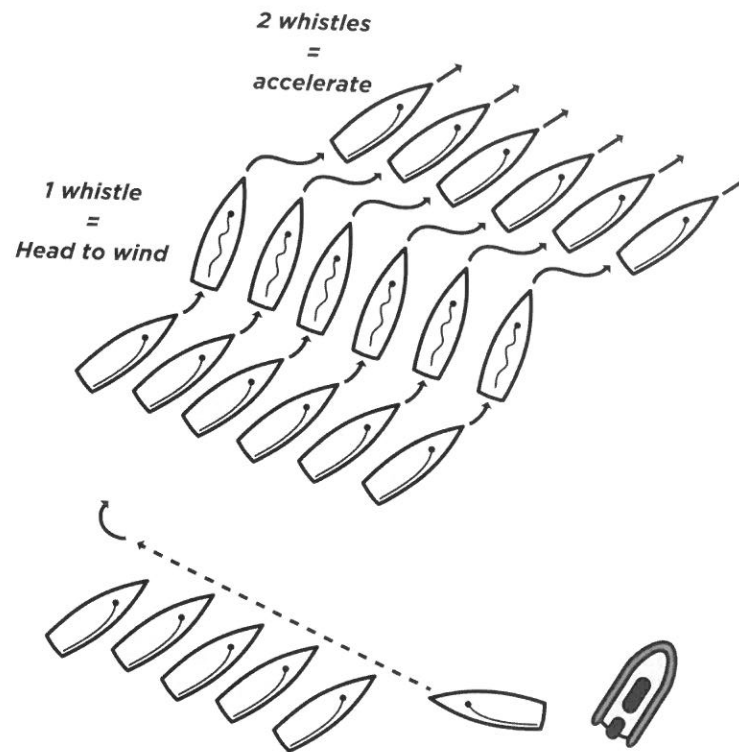
TIPS

- Do rolling starts, sailing a beat every third start. This makes them practise acceleration as well and gives the sailors a chance to sail instead of being in the same place all the time.
- Film the technical aspects of the double tack and timing of the double tack.

DESCRIPTION

Sailors need to double tack every time they have a windward gap, protecting their leeward gap this way. Focus on the technical aspect: not accelerating out of the second tack (because otherwise you will end up over the starting line).

WIND



STOP/START

LEVEL: ★★★

OBJECTIVE

To learn how to stop the boat going head-to-wind and to learn how to accelerate again.

TIPS

- Tell sailors to cross behind the rabbit with a bit of distance between each other, so every sailors will have a clear lane

DESCRIPTION

Start in a line-up or rabbit start so all sailors are lined up with equal distance between all boats. One whistle means that sailors need to stop the boat and turn head to wind using the same technique they use to hold the boat in the same position while starting. Two whistles means that sailors can accelerate again as fast as possible as they would on a starting line.

LONGER TACK ON PORT

LEVEL: ★★★

OBJECTIVE

To make sailors aware that if they want to tack on to port right after the start, they will need to create a windward gap on the starting line

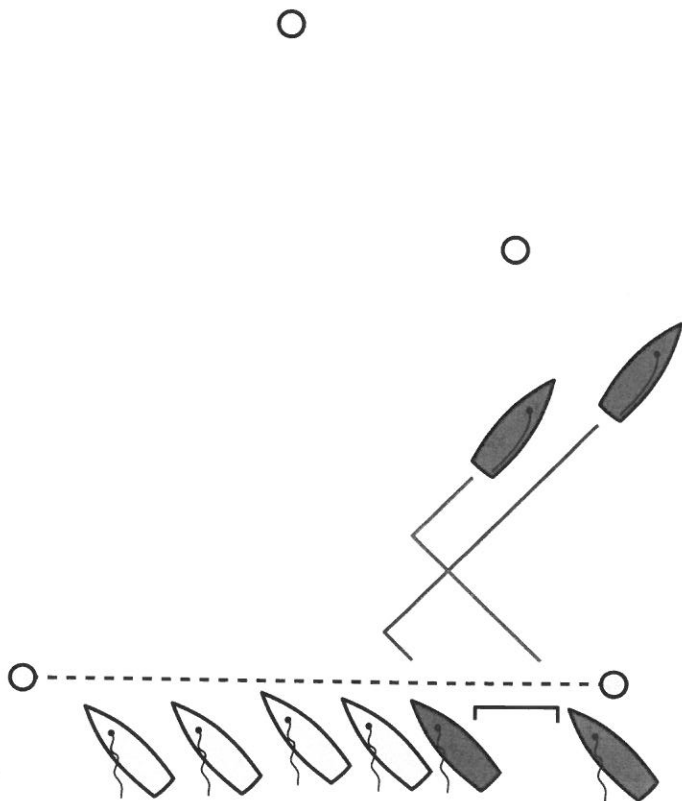
TIPS

- The closer you place the boundary mark to the start, the faster the sailors will get pushed over the port lay-line.
- Vary by changing distance of the mark.

DESCRIPTION

Put in a starting line and windward mark, place a mark to the right of the centre in the middle of the course. Boats will need to pass this mark to the right, forcing them to tack on to port right after the start.

WIND



DEFEND & ATTACK

LEVEL: ★★★

OBJECTIVE

There are 2 roles in the drill with 2 separate goals:
1. Defend: The boat that is on the line learns how to defend a leeward gap.
2. Attack: The boat coming from the pin-end learns how to find a gap on the line.

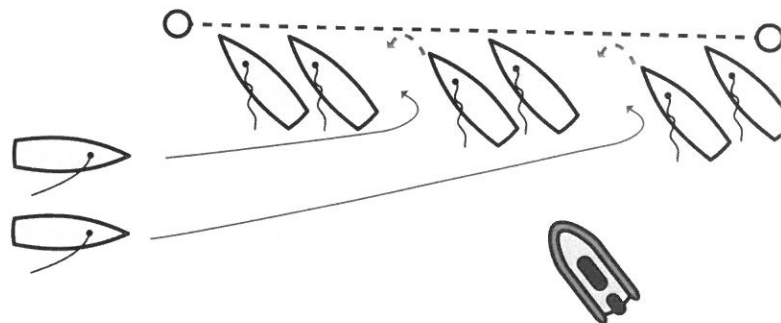
DESCRIPTION

There are 2 or 3 boats that get the assignment to come in from the pin-end of the start with only 1 minute or 40 seconds to go. They will need to find a gapsailing on port tack, reaching underneath the boats on the line. The boats that are on the starting line need to defend their leeward or windward gap from the boats that try to get in there.

TIPS

- Boats on the line can defend by making "S-turns" on the spot to scare any one off from stealing their gap.
- Boats trying to find a gap are better off doing it on port-tack because most of the fleet on the line is on starboard tack drifting from RC to pin-end. This means that if they sail port tack underneath the boats on the line, they will come across more gaps and therefore more chances.
- To mix the drill up, try to do rolling starts. Meaning every 3rd start sailors will sail a beat to the windward mark, so it is not just starting.

WIND



HOLDING YOUR LANE

LEVEL: ★★★

OBJECTIVE

Learn how to hold your lane after the start, and what to do to able yourself to hold your lane after the start.

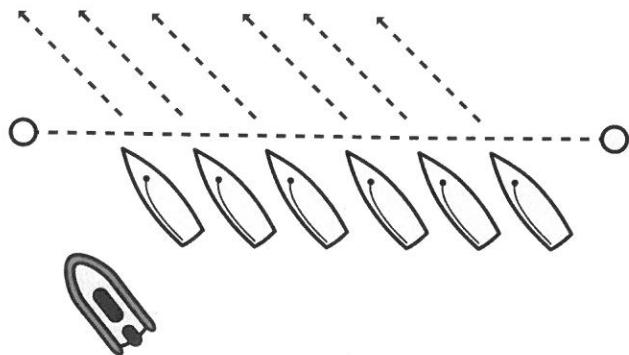
DESCRIPTION

After the start, sailors can not tack for a period of time (15sec/20sec/30sec). The longer the period they can not tack, the more difficult the drill is. Sailors need to create a leeward gap on the starting line before the start to able themselves to keep their lane for a while after the start.

TIPS

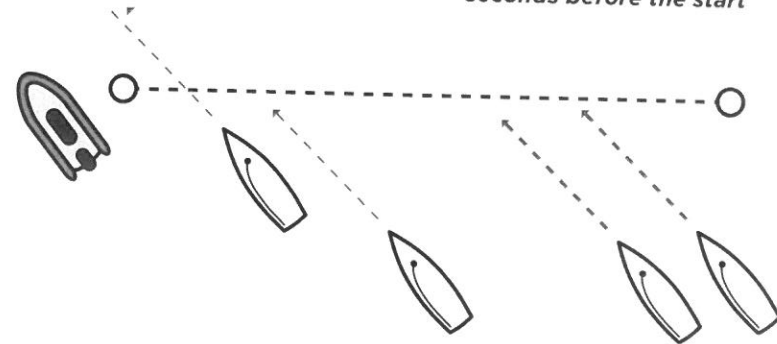
- Use the drill to focus on several skills: starting technique / acceleration technique / shifting gears while sailing upwind.
- Focus only on 1 of the skills to make it easier, focus on more skills to make the drill more difficult.
- Do rolling starts, meaning the sailors sail a beat every 3rd start towards the windward mark. This way the drill will not get boring and just about starting.

WIND



WIND

Start sailing 10 to 20 seconds before the start



TIME & DISTANCE

LEVEL: ★★★

OBJECTIVE

Learning to estimate time and distance to the line in different conditions.

TIPS

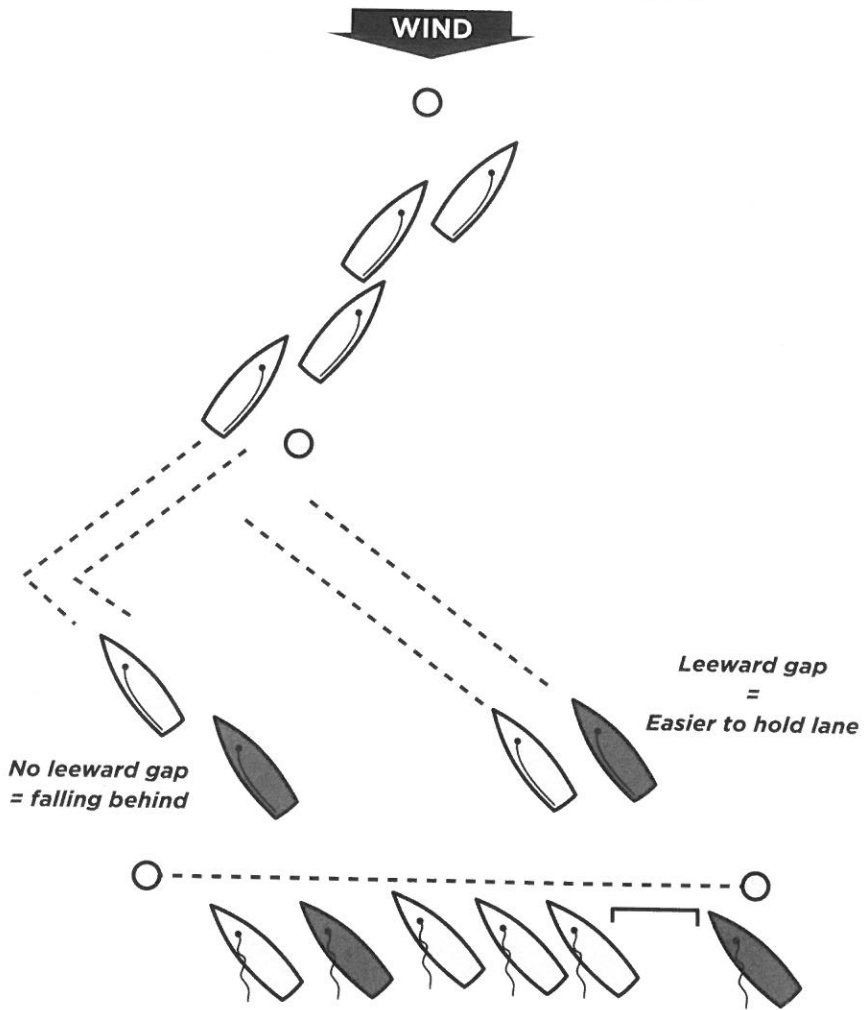
- To make the drill more difficult you can make the course a little longer. This way sailors will need to hold their lane for a long period of time.
- Make the start line smaller to make it more difficult to hold a leeward gap.

DESCRIPTION

Sailors need to start accelerating at a certain time (10sec/15sec/20sec) before the start. They are forced to sail, so this way they have to estimate how much distance they will cover in this period of time telling them how far away from the line they need to position themselves.

As soon as the sailors know where they are compared to the line, they need to know how long it will take for them to get to that line at exactly 0 seconds doing topspeed. Tell the sailors to ask themselves the following questions:

- How long will it take for me to reach topspeed in these conditions?
- How long will it take for me to get to the starting line in these conditions?



LONGER TACK ON STARBOARD

LEVEL: ★★★

OBJECTIVE

To make sailors aware that with a starboard tack of the starting line a **leeward** gap at the start is important.

TIPS

- To make the drill more difficult you can make the course a little longer. This way sailors will need to hold their lane for a long period of time.
- Make the starting line smaller to make it more difficult to hold a leeward gap.

DESCRIPTION

Put in a starting line and windward mark, place a mark in the middle of the upwind beat but to the left of the centre. Boats will need to pass this mark to the left, forcing them to sail longer on starboard out of the start.

ABOUT THE AUTHORS



Pim Stumpel - coach

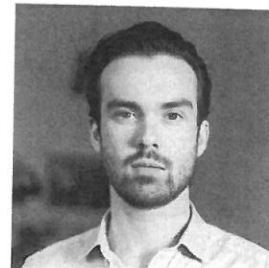
After being a sailor on several national teams in different youth sailing classes in the Netherlands, Pim got into coaching at a young age. Since 2008 he has been the headcoach of the National Optimist program in the Netherlands and has since then established himself as one of the most successful coaches in youth classes like Optimist and Lasers.



Ben Koppelaar - coach

After a successful sailing career in Lasers, Melges24 and 470's winning several medals at European- and World Championships, Ben has been involved in coaching since 2008. During his coaching career he worked with experienced youth sailors and Olympic sailors at different levels.

SPECIAL THANKS TO:



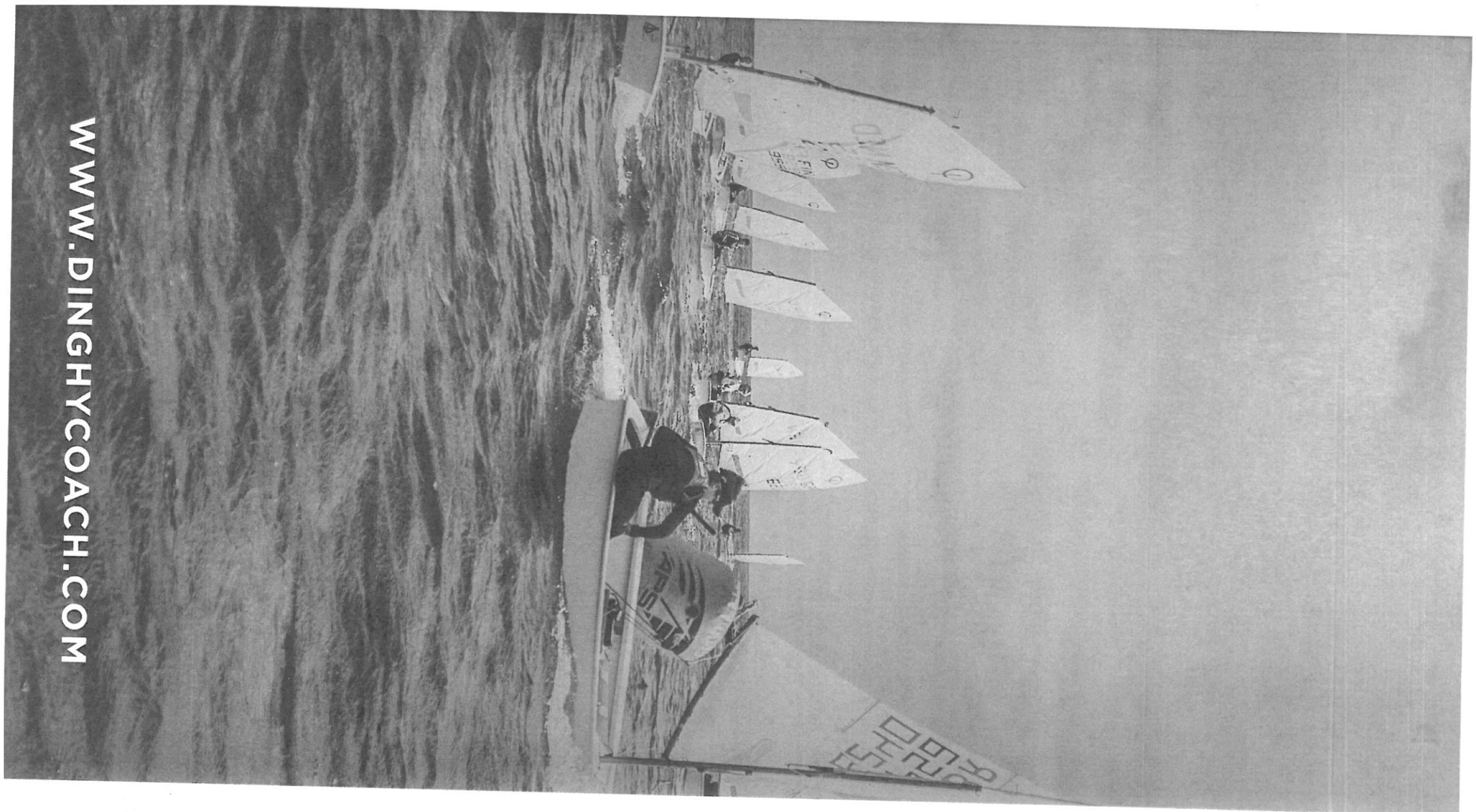
Tomas Stumpel - art director

As an art director Tom has been responsible for the general look and feel of all DinghyCoach designs and releases. His creative ideas and view on style combined with his experience as a sailor when he was younger, made him the ideal person to illustrate this book.



Huub Lambriex - mental coach

As an Olympic sailor during the 1984 Olympics in Los Angeles (USA) in the Tornado class, Huub is very experienced in high performance competition. He studied business management at Nijenrode University and started a business as a wholesaler of yachting equipment. After selling his business in 2001, he is now focusing on helping athletes and coaches integrating the mental aspects of sports into their programs and campaigns.



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