



AKARANA  
SAILING ACADEMY

# OPTIMIST LEVEL 3

Student Handbook

## WELCOME TO OPTIMIST LEVEL 3

If you're reading this booklet, then you have successfully completed Optimist Level 2 and are now ready to embark on Optimist Level 3!

As you read through this book you will continue to learn new skills and build on the skills from your Level 2 course while starting to branch out into racing skills.

At the back of this booklet there is a checklist dedicated to your level of sailing. In your Level 3 course your coach will help you work through the checklist from everything to learning some tactics about racing to sailing our boat as efficiently as possible.

To pass your Level 3 your coach will assess whether you complete the skills in the checklist consistently.



Established in 2001, the Akarana Sailing Academy was founded to provide opportunities to the children of current members. Parents then had the option to go sailing, while the kids learnt to sail in a safe and friendly environment. For 20 years there has been a range of courses available, which has resulted in our sailors becoming local, national and world champions.

The Royal Akarana Yacht Club is one of the New Zealand's oldest yacht clubs and occupies a unique place in sailing history. Throughout the last 125 years it has been at the forefront of New Zealand sailing.

The Akarana Sailing Academy offers a range of sailing opportunities, so the whole family can be on the water together.

RAYC is where many Olympic sailors choose to train including gold and silver medallists Peter Burling and Blair Tuke and silver medallists Alex Maloney and Molly Meech. Sailing is a sport for life, whether you're sailing for fun or if you are planning on a pathway to race on the world stage.

## BOAT SET UP AND CONTROLS

Now we're getting more responsible for our boats and how well we've set them up we need to be checking a few things before hitting the water. These are good habits for when we move into Fibreglass Optimists after finishing this level.

To be a good competitor we always need to check this list (new checks are in blue)

Check lists are a great way to ensure you never forget the important little things

- Masts are tied to the boat
- Rudder is on and won't fall off
- Centreboard is bungeed on, so it doesn't fall out if you capsize
- Bailer is attached and easy to reach
- The sail is set up for the weather conditions
- Mainsheet is untangled and reaches all the way to a downwind angle
- No ropes are fraying (mainsheet, control lines, painter)
- Check buoyancy bags (on the fibreglass boats)
- All sail ties along the mast and boom are done up

In Level 2 we talk about sail Controls and what they do to our sail. We talk about having a either deep or a flat sail and when we need them.

Now you're in Level 3 we need to start thinking about this every time we go sailing. When rigging up our boat we need to decide what to do with our controls and what type of sail we need for the conditions.



Here's a quick reminder of what controls affect what part:

- **Kicker** – Controls the **leech**
- **Outhaul** – Controls the **foot**
- **Sprit Tension** – Control the **luff**

Tightening our controls flattens our sail for heavier wind and having loose controls deepens our sail for lighter wind.



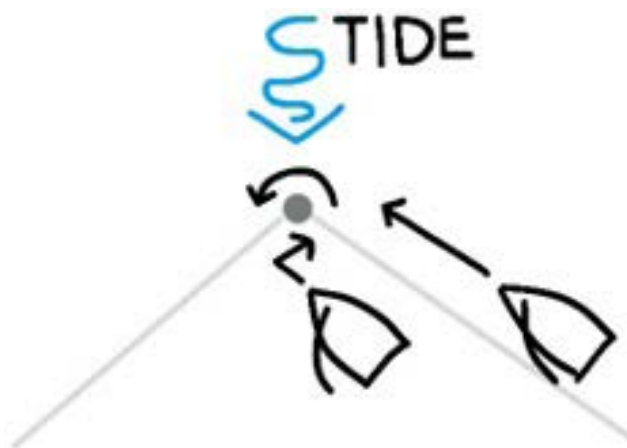
## UNDERSTANDING WIND & TIDE

Wind and Tide both have huge effects on our sailing and racing. Understanding them can help us sail our boats even better!

In Level 2 we talked about tide in our sailing area and what direction the tide moves in and out of the bay. The tide is even stronger outside Okahu Bay. In places like the Shipping Channel or Mechanics Bay, the tide is super strong so we need to start thinking about how it can affect us.

If we are sailing around a course in the shipping channel the tide can push us and make it harder to sail around the marks.

So, to make it easier to work out we need to always know which way the tide is moving!



Wind can also have an effect on how we sail. Okahu Bay is sheltered by lots of trees, buildings and hills. This means in Okahu bay sometimes the wind direction and strength can be affected by the environment.

If the wind was coming from the South, it would come over the hills and buildings before reaching the water.

**We call this a Wind Shadow.**

A wind shadow means the wind is blocked by something. It can be permanent or temporary (like a big cargo ship driving past!).



**We want to start thinking about what land or shapes might affect our wind depending on where we are sailing.**

## SAILING ESSENTIALS

Our sailing essentials are key to learning how to race and sail our boat quickly. A good understanding of these will make you a far better sailor! Remember you are the captain of your boat, and you are in control!

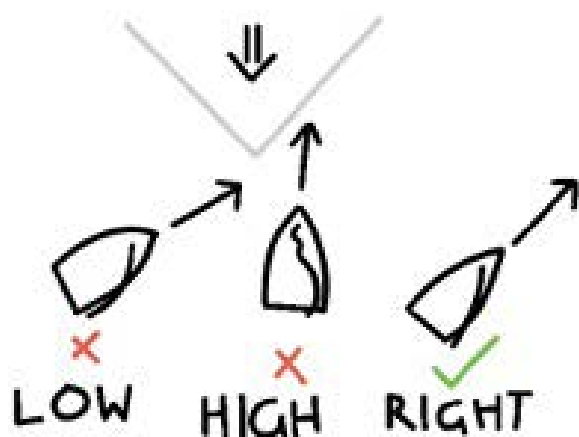
To recap these essentials are:

- Sail Trim
- Course
- Balance
- Body Weight
- Centreboard

Now we've got a better understand of what each of these are from our Level 2 course it's time to practice and understand them at a more complex level.

### SAIL TRIM

When sailing around a racecourse Sail Trim is super important. If our sail trim is better than another boats, we might be able to beat them in a race! And if we don't trim our sail in the right position, we won't maximise our speed in races.



### UPWIND

Sailing upwind can be really challenging but when you get the hang of it after a bit of practice it becomes one of our best racing tools.

We need to always be checking our tell tales. These strings indicate how the wind is flowing over the sail. We do a rotation check when we're sailing upwind.

**1. Check our Trim**

**2. Check tell tales**

**3. Where is the mark**

### REACHING

When reaching we can lose focus because it's so easy! But we need to remember to keep an eye on our sail and tell tales. By looking at our tell tales if we change our course slightly or the wind changes, we'll know how to adjust the sail again.

### DOWNWIND

Sailing downwind can be a bit scary if its windy but learning how to control our boat and trim our sail helps with this! Good control will help us with our confidence. In light wind our sail is all the way out to 90 degrees. In heavy wind having our sail too far out can make the boat tippy. Even though it can feel like pulling in our mainsheet is a bad idea it actually helps us control the boat!

## SAILING ESSENTIALS

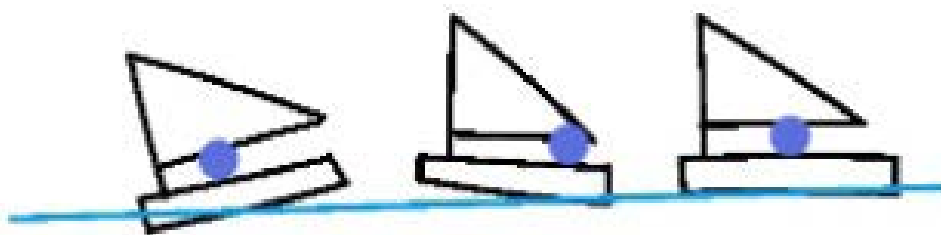
### COURSE

Now becomes Course Made Good which means the same thing. We need to think about the fastest way to sail around our course. This could be thinking about the wind, tide and how our boat is set up and positioned. It's about multi-tasking everything in our essentials well!

### BALANCE

Now we understand our balance and where we sit on the side, we need to start thinking about how this changes for different wind strengths.

In light wind we want the wide stern of our boat out of the water, we do this by sitting further forwards. In heavier wind we sit further back by the widest part of the Opti for hiking and to stop our bow digging into the water.



### BODY WEIGHT

Similarly to balance we need to always be thinking about our body weight and how it affects the boat depending on the wind strength.

*If its light wind we need to be careful with our weight, make sure we move around the boat slowly and gently, so we don't knock all the wind out of our sail As well as sitting inboard so our weight is working together with our centreboard and sail. Doing this reduces the amount of boat in the water and less boat also means less drag through the water.*



*If its heavy wind, we don't have to worry about knocking wind out of the sail and we will usually need to be hiking to keep our boat flat. Keeping our boat flat is really important! A flat boat is a fast boat.*

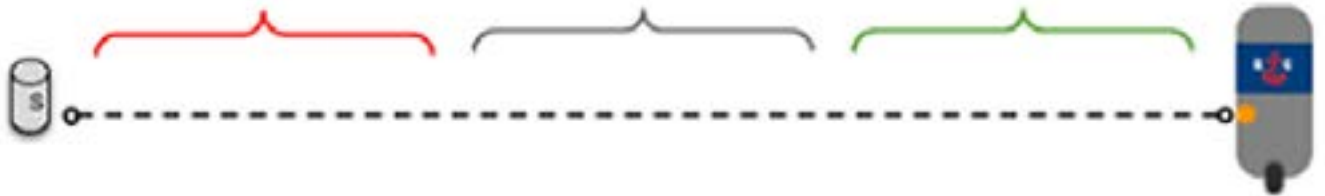
### CENTREBOARD

In Level 3 we need to start working on using our centreboard around the course. Our centreboard keeps our boat moving in a straight line instead of drifting sideways especially if we are sailing in tide! When we sail upwind, we want to always go in a straight line in the direction we're pointing. If we were to lift our centreboard while sailing upwind, we would drift sideways and sailing our course would really difficult. But this is always why lifting our centreboard up while sailing downwind is great! It removes some of the drag in the water and because we're travelling with the wind we don't need to worry about drifting! It'll help us sail downwind even faster!

## START LINES

In racing we use a start line just like race cars and runners. So, a key skill we're going to start learning is how we sail our boat across a start line and understanding how sailing start lines work.

This is what a start line looks like! Your coaches will draw something similar on the whiteboard.



### Pin End

### Boat End

To signal when 'GO' will be, there will be a countdown (usually a few minutes) with whistles or hooters to mark the time passed before the final whistle/horn which is 'GO'

EG: 3 minutes until go (whistle), 2 minutes until go (whistle), 1 minute until go (whistle) and then when no time is left (last whistle).

After the last whistle or horn you are allowed to cross the start line.

Avoid crossing the start line on 'port tack' – this skill is saved for advanced levels

We have a rule we like to use when learning how to cross start lines. We call this rule Time and Distance.

This means we always need to know how long (time) and how far (distance) we have sailed from the start line.

We think about it like this: If we sail 10 seconds away from the line we would then need to tack and sail 10 seconds back to the line.

***If we sail too far away, we might not have enough time to sail the distance back to the start line***



So, it's really important while we are learning that we stay close to the start line, so we don't have to sail much distance to get across once the countdown goes.

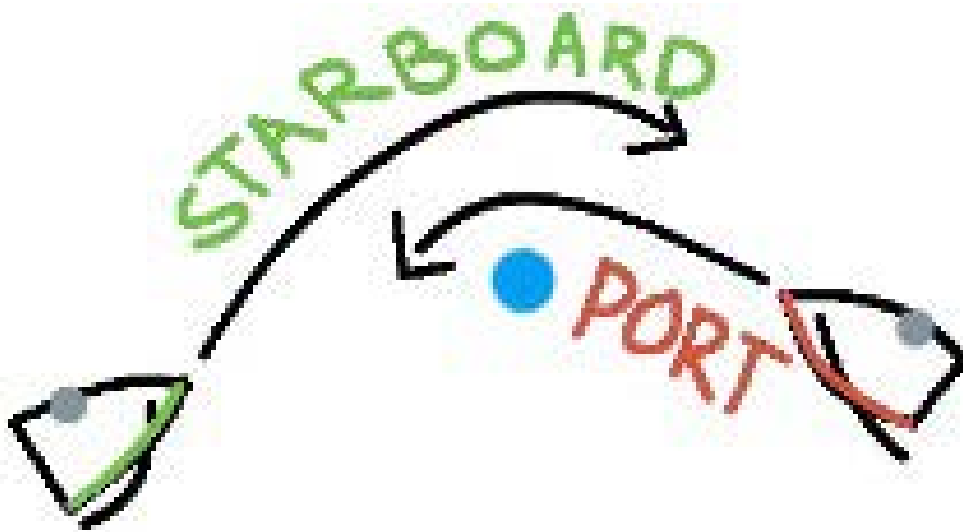
## COURSE & MARKS

Because we're going to start doing some racing in Level 3, we need to nail a few key skills before hitting the racecourse.

Understanding a whiteboard course or course diagram is really important as there won't always be a coach around to tell you which direction to go and what mark to sail to next.

### PORT OR STARBOARD MARK ROUNDING

In sailing we have 2 ways we can go around a mark. We can round the mark to Port which means the Port/Left side of our boat is closest to the mark. Or we can round to Starboard which means the Starboard/Right side of our boat is closest to the mark as we go around.



If we go around the mark the wrong way in a race the officials won't count that you've been around, and you could be disqualified from a race. So, it's always important to know what way to go around the marks in a race.

### RULES AND 'PINCH POINTS'

There are a few rules we need to know now we've started racing.

*The first and most important rule is to ALWAYS avoid contact or crashes!*

When coming up to a mark or going around a mark there is likely to be a few boats wanting to do the same. This is what we call a 'Pinch Point' because all the boats in the race that are spread out come back together at this mark. So, we need to know our rules as we get closer to the mark.

- 1. Are we on Port or Starboard?**
- 2. Are we to Windward or Leeward of any boats?**
- 3. Are we Clear Ahead or Clear Astern any boats?**

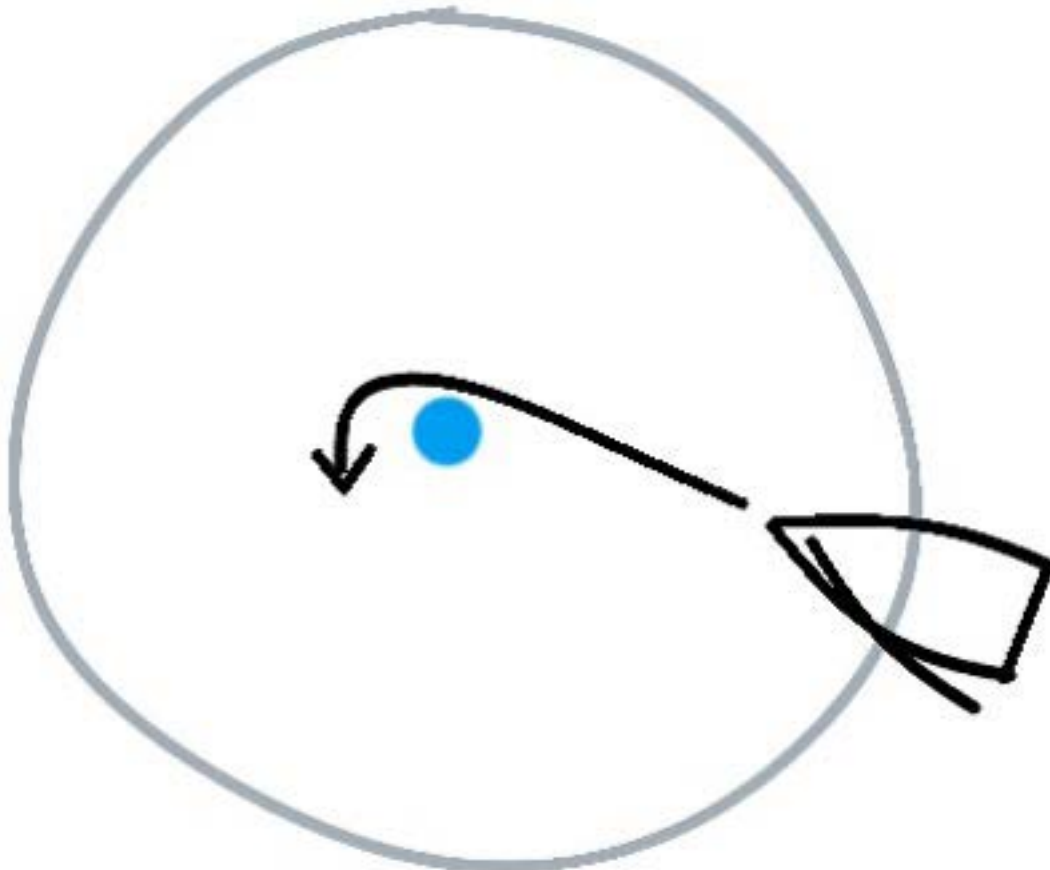
## MARK ROOM

Marks have rules of their own and as boats get closer different rules might start to apply.

There is a Zone around each mark where different rules apply.

This Zone is 3 boat lengths in every direction (forming a circle) around the mark. This Zone is invisible, you have to imagine it. In this zone a different set of rules apply.

This is to make sure all the boats sail around the mark fairly and avoid collisions.



The key is to avoid any collision at the marks and sail around without blocking any boats from getting around the mark to the next part of the race.

### Set Up and Controls

- I always check my boat before sailing or racing
- I set up my controls for the conditions without prompting
- I understand what the different controls do to my sail

### Wind and Tide

- I have been sailing in tide (Mechanics Bay, outside the sticks etc.)
- I can sail around marks in the tide
- I understand wind shadows and how this changes the wind

### Start Lines

- I can sail across a start line in a timely manner
- I understand the countdown and pre-start
- I can control my boat speed coming towards the start line

### Sail Essentials

- I am actively using and thinking about all my essentials
- I can correct my technique without the coaches prompting
- I can sail my boat confidently and competently in a range of conditions

## COURSE CHECKLIST

### Courses and Marks

- I understand whiteboard diagrams of race courses and can remember the details about the course
- I know how to round a mark to starboard and port
- I am confident in my racing rules and **ALWAYS** avoid collisions



## NEXT STEPS

If your coach has checked off all your skills in the checklist then your next step is to begin your Green Fleet Course!

The Green Fleet group is a race group and sailors can stay in this group for as long as they want! Sailors will use all their skills from the last three courses to begin racing and building up their tactical and strategic knowledge. Hopefully getting to the point where they travel to regattas and start winning some races!

# MY OPTIMIST LEVEL 3 LOG BOOK

Date	Wind Direction & Strength	Activities We Did	What I Did Well	What Can I Improve On

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Date	Wind Direction & Strength	Activities We Did	What I Did Well	What Can I Improve On



# AKARANA SAILING ACADEMY

WHAT'S NEXT?

OPTIMIST GREEN FLEET

Now it's time to move into the racing world  
and Green Fleet is the pathway to  
understanding how to prepare for regattas  
and learn how to race

[rayc.co.nz/academy](http://rayc.co.nz/academy)