

# Beginners Guide

Updated 08th July 2007

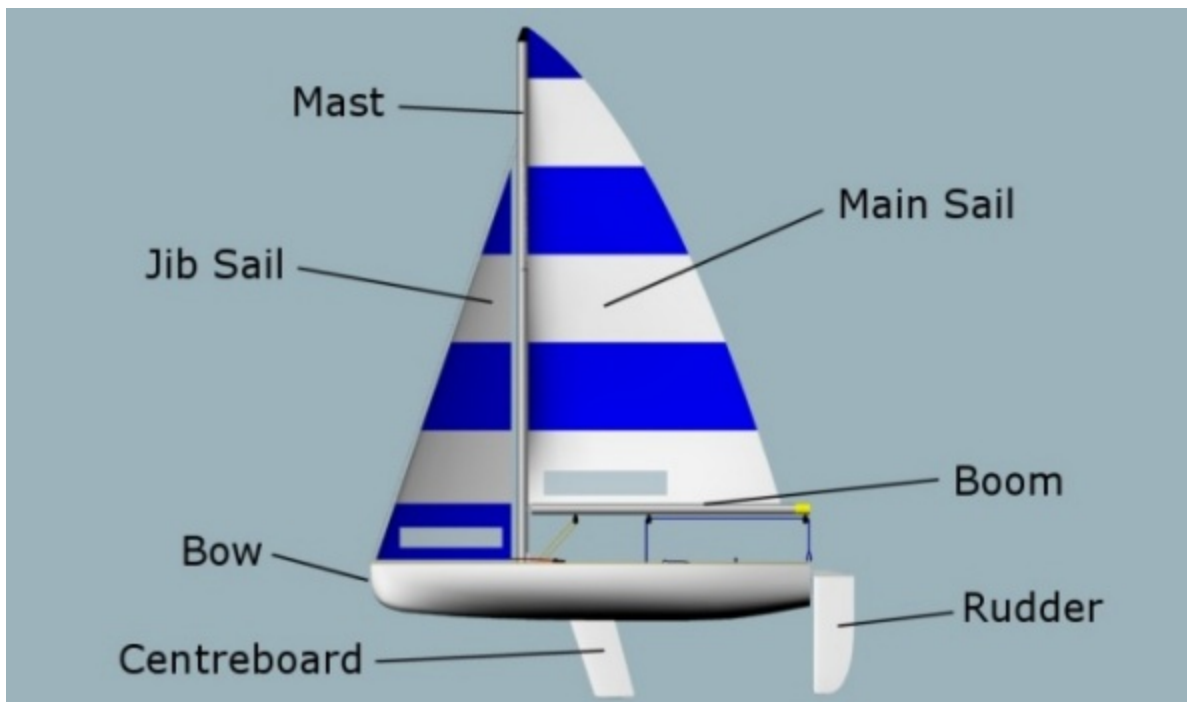
Sailing doesn't take long to pick up, it's just probably not like anything you've done before. There's a lot of new words to learn - what the hell's a halyard? And how can a boat sail into the wind if it's the wind that's pushing it?

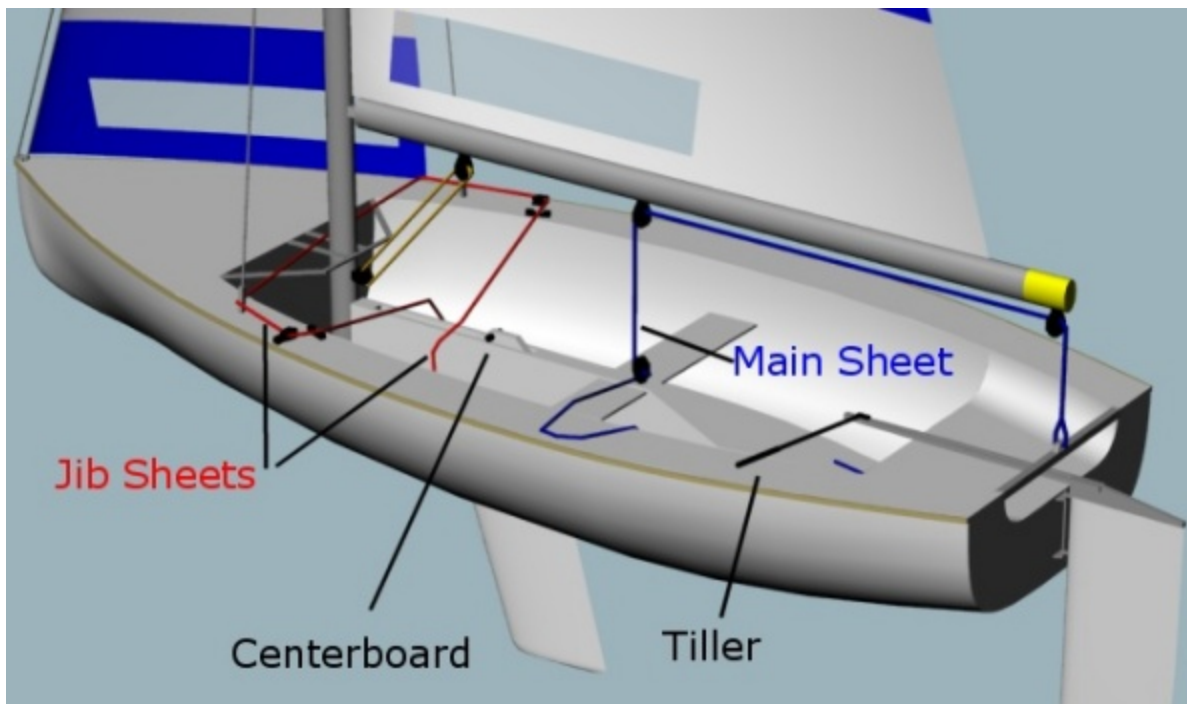
This guide covers the very basics, then gives a little about how to be a crew and how to helm (steer) a boat. There's also some basics of team racing if you're interested and wondering how to get started racing. Thanks to Fiona for helping out with it.

## 1. The Very Basics of Sailing

### Parts of the Boat

Here's one of our lovely Fireflies with all the important bits labelled...





Pretty straight forward, huh?

### The Points of Sail

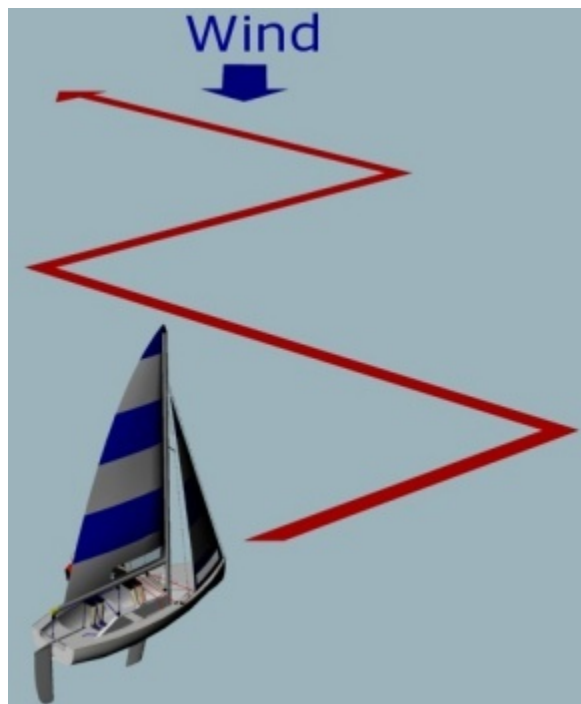
So how does a boat actually sail? Simply, the wind pushes on the sails which pushes the boat along - although you need to have the sails in the right shape, depending on which direction you want to go in relation to the wind. Pull the sails in to sail towards the wind, ease them out when sailing away from the wind.

A boat can sail in pretty much any direction except for straight into the wind. The nearest you can aim towards the wind is about 45 degrees left or right, so to get to somewhere upwind, you can zig zag left and right.



By setting the sails right you can get from A to B, or even round C then onto D and across the finish line. The important thing to remember is where the wind is coming from - look at the direction of the waves, look at the wind blowing in the trees, and feel it on your face.

## Tacking



Doing a Tack is to change course by turning the bow of the boat through the wind.

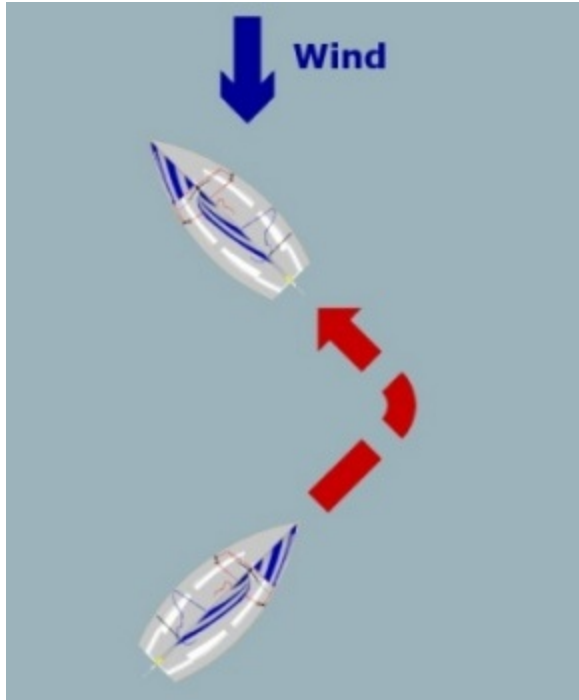
To travel upwind, we need to steer a zig-zag pattern.

Every time we change direction doing this, we do a tack.

To begin the tack, whilst sailing on a close hauled course the helm starts the boat turning towards the wind (see the Points of Sail, above). When the boat is facing into the wind, the crew and the helm move to the other side of the boat. The crew then pulls across the jib sail across to the opposite side using the jib sheet. The helm then straightens the boat out on the new course. (The main sail will move itself).

Things to remember:

- as a crew, make sure the jib is ready to go and isn't stuck in the cleat (a little grip type device).
- as a helm, try to line up on the same angle as you were going to the wind. You should turn through about 90



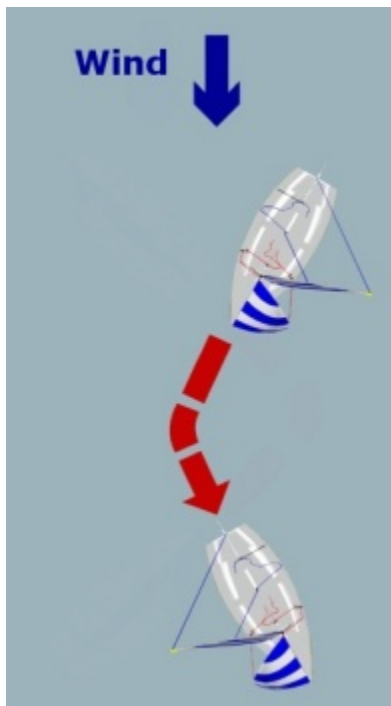
degrees.

- try to move together, and roll the boat as you straighten out on course. If you can learn to Roll Tack you can pick up extra speed in races.

How do you know when to tack? It's usually good idea to tack before you hit something, ie the shore, or another boat! In general it's fastest to do as few tacks as possible as they slow the boat down through the turn - however you might want to keep towards the middle of the loch as the shore can be less windy.

As a crew, your helm should tell you when your about to talk by asking something like "ready about?" or just "ready to tack?".

## Gybing



A gybe is the equivalent of a tack when sailing away from the wind, on a run (see the points of sail again if you need).

To begin a gybe, the helm turns the boat towards the new direction it'll be going, and pulls in on the main sheet to pull the boom across the middle of the boat. Once the wind catches the main sail, it'll swing (fast) across to the other side. It's easy to get hit in the head by the boom, so make you duck! The helm then straightens up on the new course, and the crew can pull the jib sail across to the other side of the boat, keeping it eased out and full of lovely wind.

As a helm it's important to know when you are going to gybe so you or your crew doesn't get hit by the boom by surprise, because it bloody hurts! If you're sailing downwind don't head straight away from the wind, always keep a bit of an angle the side, and let your crew know if you want to gybe.

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## **2. How to Crew**

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## **3. How to Helm**

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## **4. A Quick Guide to Team Racing**

Team Racing is the type of racing we do for the SUSA Leagues (and onto BUSA).

A team consists of 3 boats with a helm and a crew each (we use the Fireflies for this) - 2 teams race at a time, six boats in total. The aim of the team is to finish with the lowest number of points - you get 1 point for 1st, 2 points for 2nd, up to 6 points for 6th.

Hence you don't need to get 1st to win - you could get 2nd, 3rd, 4th (9 points total) while the other team gets 1st, 5th, 6th (12 points total) and you'd win!

The course is usually an S shape, with a beat, reach, run, reach, and beat to the finish:



There's a 3 minute count down to the start of the race, signalled by soundings of a horn from the committee boat which sits next to the startline. During this 3 min countdown the startline can get pretty crowded and there'll be a lot of shouting!

After the horn goes, the race begins with an upwind leg to the first mark, then on to a reach, run, reach, and up to the finish line. Each of these parts of the race has it's own tactics - in Team Racing, it's not just important to go fast, but to make sure your team mates are doing well. There are loads of different manoeuvres to pass other boats, or hold them up to let someone else past, and there are ways to counter each of these - too many to talk about here, the best place to see them in practice is out on the water!.

## 5. Crewing in a Race

### **Start**

Keep an eye on the committee boat and listen for the 3 minute countdown starting - start your watch ticking!

- Call the time constantly. Every 30 seconds for the first two minutes, and count every second from about 15 seconds to go. This is all according to preference, ask your helm how often they want you to call the time.
- Call how close your boat is to the line i.e. "one boat length until we are on the line"
- Tell the helm about other boats around you that they may not have seen

Keep light on your feet, the helm may need to manoeuvre quickly and will need your weight in the correct place to do so; weight to windward to bear away, weight to leeward to round up.

- Have the jib sheet uncleated in your hand throughout the start sequence so you can quickly vary the boats speed or back the jib if necessary

Keep an eye on the pin end (port) of the line and let the helm know if you might hit it!

**During the Race**

- Have a checklist in your head and go over it again and again for the whole race
- Is the jib set?
- Is the boat balanced? - Are there any gusts or lulls I need to call to my helm?
- Where are the other boats on the course, what positions are our team in?
- Where is the next mark/layline? Tell the helm.

**Rounding Marks**

- Tell the helm about boats on the opposite tack and if you will need to avoid
- Make sure your helm doesn't hit the mark, they may be concentrating on other things. Tell the helm when you've passed it, and can bear away/round up

Don't worry if you are unable to contribute to the team racing tactics! You will make your helms job as a tactician a lot easier if you remember the above.

Just keep talking (about relevant stuff). I think that there should be chat in the boat at least 90% of the time, but every helm is different.

## 6. Race Tactics

**Starting – Defensive**

Some suggestions if you are being hunted in the pre-start. The general idea is to create confusion for your opponent by introducing as many variables into the equation as possible. Each variable gives you a chance to turn the tables.

- Go head to wind, a good move if you want to stay in the same spot for a period of time for example, to judge your run for the line
- Crash stop by back winding the mainsail. Your opponent should shoot forward allowing you to get on their tail - Try to lead the opposition into committee boat
- Swap opposition boats with a boat from your own team (commonly referred to as the switch manoeuvre)
- Lead opposition into a boat from your team on starboard or even better a boat from their own team

**Starting – Offensive**

If in control of an opponent before they start try to

- Force opposition boat away from start line preferably down wind
- Force opponent over start line with less than thirty seconds to go without crossing yourself

**Upwind – Defensive**

If an opponent tries a slam dunk:

- Bear off before opposition boat has completed tack to get out of their wind shadow
- Tack immediately
- Never do both, choose one and stick with it!!

If cover cannot be shaken

- Tack on another opposition boat
- Get a team mate to tack on the boat covering you
- Do a double tack (two tacks in quick succession)

This is an absolute last resort and relies on two conditions to work. One the opposition boat must follow you through both tacks, and you must be able to tack faster than your opponent.

**Upwind – Offensive**

Many people believe the first beat of a team race should be sailed as if it were a fleet race. While this approach has some merit especially against weaker sailors it is generally inappropriate in team racing. Alternatively a lot of people forget that a teams race is still a yachting race and things like shifts, gusts and tidal factors can easily win a team the race.

- Sail the shifts
- Take into account where the tide is strongest and which direction it is flowing.
- Sail the favoured side of the course relative to your opponents.
- Tack only if you will gain more out of taking than you will lose in the tack (usually about two to three boat lengths).

**Reaching and Downwind – Defensive**

Think about bouyroom for the next mark (two and three) before you even round mark one. Marks are a rare opportunity to pass boats and can get complicate! Think about the big picture:

- Do not take an opposition boat up if there is another opposition boat behind them
  - Only take an opposition boat up if that boat is followed by one of your team mates and that team mate is not followed by another opposition boat.
  - In reverse these are offensive moves
- Generally think what is the best overall option for the team.

**Reaching – Offensive**

The crew's position in the boat and trimming of the jib are crucial. Almost to the point that this should be all they are concentration on in heavy winds.

**Downwind Offensive**

Crews should not sit there for the ride!

- Centreboard position must be below the kicker ropes before jibing
- Face the immediate opposition and tell the helm;
  - ~ What other boats are doing
  - ~ What gusts are coming
  - ~ Whether the boat is going fast relative to other boats
  - ~ If the team is winning or losing

If one opposition boat rounds in from of two boats from your team, one boat sails the fastest course to bottom mark while the other boat covers the lead opposition boat.

If you need to gain luffing rights sail two boat lengths to the side of them and then sail back and take them up.

**Finishing**

Do not finish if your team is losing

- You have to try something or be able to see that another member of the team can and will do something.
- Otis Manoeuvre: If your team is 2,3 and 6
  - ~ 2 and 3 take out 4 and 5
  - ~ Leaves 6 to come 2nd and 2 and 3 to come 3rd and 5th

Oh, and what the hell's a halyard? - It's the rope that pulls up the sails.