

## Introduction to Double Handed Sailing Manual

- Sailing in a Boat with another person brings new challenges and benefits to the way we sail.
- Challenges: Working to communicate with another person, to make the boat do what you want, you need to work in sync with your teammate now to do it effectively. Learning to rely on your teammate to help you gather information and make decisions.
- Benefits: Having another set of eyes in the boat to watch for other boats or for wind. Generally speaking it's more fun to be sailing with someone.

### What is Different?

In a single handed boat, everything is on you from the tactics to the boat speed. When we move to double handed we can start to split up the work on the boat. For instance, In double handed boats the skipper becomes much more focused on driving the boat in a straight line, and relies on their crew for information about the course and other boats.

Learning from an early point to rely on your partner and grow together is one of the most important factors in having a successful double handed team. It's all too common for the skipper in a double handed boat to take the majority of the responsibility. Though this may prove successful at local events, in the long term a balanced team will win out.

As you go through this document, you'll be shown what jobs are normally designated to which partner. There is some personal preference, but overall it's important to make sure we spread the load as much as possible.

### What Is similar?

It's all still about boat speed, boat handling, and tactics. The three pillars of sailboat racing. The dynamic is different but otherwise we still practice the same stuff: get faster, get smarter.

### What new Skills should we expect to pick up?

**Driving a boat with 2 sails (without rudder):** Now that we have 2 sails, we can very easily steer our boats without using the rudder, which we know is slow every time we use it. Simply put, if you pull the jib in you'll turn down and if you pull the main in you'll turn up. The opposite is true for easing. If we use this in continuity with our body weight (leeward weight to head up,

windward to head down), we can turn double handed boats extremely smoothly while maintaining our speed.

**Moving in the boat:** When you have two people in 1 boat, it changes the way you move. In a single handed boat you move around and roll or rock the boat how you want by yourself. In a double handed boat you need to work with your partner for the same result. Skippers and Crews have very different ways that they can move due to where they exist in the boat.

**Skippering:** As a skipper, you move very similarly to in a single handed boat. One small difference is that you'll spend almost all of your time on the rail compared to sitting in on a sabot. It's important that skippers keep a tight posture, knees together, hands low, feet flat in the boat, and weight forward as you can. When switching sides, the movement is a hop. You want to avoid spending anytime at all standing in the boat, switch from one side to the other in one motion. As far as hiking, you should be moving much less than your crew. Your crew should be moving in and out not you.

**Crewing:** As a crew, you will have to move very differently from how a skipper does. Generally, Crews should be facing the back of the boat whenever they are sitting in. You need to be actively watching the stern of the boat to see how the boat is heeling. It is your job to fine tune the flatness of the boat. You need to move up to the rail and down to leeward constantly as necessary. To become a stand out crew you will look to move constantly but smoothe your movements out so it doesn't negatively affect speed.

CFJ

**Rigging and Setup:** In the FJ, the most important part to get right when setting your boat up is the jib halyard tension. The only way to measure if your tension is right is out on the water.

Testing tension: Step 1 - Both skipper and crew trim their sails to an upwind sailing position.

Step 2 - Skipper overtrims main by a few inches

Step 3 - Crew reaches to the leeward shroud and shakes it to check "dangle"

Dangle is how much that shroud can move freely. The ideal amount of dangle is achieved when the shroud is still taught at close hauled and just gives to some dangle as the skipper goes to over trim.

Fjs have something called Jib cars, used to control the shape of the jib (similar to an outhaul). They have many different settings but we usually refer to each setting by how many of the pin holes are showing on either side of the block. In Medium Wind conditions we recommend having two pin holes showing behind the block and moving back to one showing if it gets breezy.

A common mistake made in both the Fj and 420 that can really slow you down is forgetting to put the rudder all the way down. It's important that once you are in your boat you go back to the rudder and push it down by hand while pulling the rudder down line.

## Club 420

Rigging and Setup: We need to spend a lot more time on land setting up the 420 compared with the FJ. In the 420, you can change your shroud pins in order to rock your mast further back or forward depending on how windy it is. Generally speaking you want the mast further back as it gets windier. On top of being able to change the mast rake, we also can change our jib halyard tension and use a tension gauge to measure it. Standard settings for an average size team (260-280) are below:

- Light air: 20'8 1/2 rake 28 tension
- Base: 20'8 rake 30 tension
- 1 down: 20'7 rake 30 tension
- 2 down: 20'5 rake 30 tension
- 3 down: 20'3 rake 32 tension

Another major difference between the 420 and Fj is the absence of jib cars. The 420 jib can only be trimmed from one spot and can't be moved. This does not mean that we can't change our jib shape still however. In the 420, we use something called weather jib trim to control our jib shape. This is basically trimming the sail most of the way you normally would, but then pulling tension onto the opposite sheet from the one holding the sail in. This gives our sail more curvature and more power for lighter conditions.

Trapeze: The Trap is probably the most notable difference between the Fj and 420. It allows you to keep the boat under control in significantly more breeze. The Trapeze is an adjustable line that you can raise up or lower down based on the wind (lower=windier). A lot of your success in the 420 is dependent on how well you can trapeze. It's a weird uncomfortable thing when you first try and the only way to get good is to do it constantly. One recommendation I would give other than go out and give it a try, is to keep your feet as close together as you comfortably can. If you get to a point where your feet are touching and you feel stable, you're there.

420s are fast and fun but require an extra level of attention and confidence. Make sure you feel safe in the Fj before moving up and everyone will have a better time because of it. The 420 is definitely the boat to get into if you want to get better fast. It has the best competition in the country and top quality coaching anywhere you go. Traveling around the country competing in the 420 should be the eventual intent of any Stage 1 sailor.