

Mission Creek Sail Tours

Sailing Fundamentals

"Something about sailing a boat brings so many senses and sensations into play that it's very difficult to pinpoint what it is, specifically, that makes me like it so much: the sight of sails and sheets overhanging the water; the foam and spray flying as the bow cuts the water; the motion of the boat; the physical and mental ballet necessary to handle the boat correctly. A sailboat might just be the most beautiful, sensuous, and intelligent blend of man/machine/elements that exists in the world today. The relationship between the three is the most harmonious I have experienced so far.

Besides, you can have a beer while you do it."

Introduction

The stated purpose of the Mission Creek Sail Tours is to provide you a fun, memorable, enjoyable and most of all safe day on San Francisco Bay.

When you participate in an MCST sailing event, one of the most important goals is for you to have fun. That being said, there are also things you need to know about the boats you'll be sailing on and sailing in general. The following is not meant as any kind of instruction, it is just to give you an overview on what to expect and some basic knowledge so you can get the most out of your time on the water.

Before stepping into a sailboat and going for a sail there are some important things to know. A typical day of sailing involves: preparing and rigging the boat at the dock, leaving the dock, sailing on different points of sail, trimming the sails, tacking, jibing and finally landing back at the dock (hopefully with the same number of persons aboard you left with). Most of the previous tasks will be handled by your MCST Captain and Crew.

Safety First

In addition to having fun, safety is of primary importance. Your MCST Captain has years of practical experience and is a USCG licensed professional. It is extremely important that you follow his instructions. If, at any time, the skipper feels that there are problems, he may, and probably will, terminate the sail. Also, if you, as part of the crew, for any reason, feel uncomfortable or your safety compromised, you can, and should, request to be taken back to the dock.

During races, all skippers and crew are required to wear a PFD (personal floatation device) per YRA rules. During introductory sails, your skipper may ask you to wear a PFD. If you choose not to, you may, and probably will, be returned to the dock.

Your first sail

Stepping onto a sailboat can be tricky. Because of this it is important to do several things first. When getting onto a boat, make sure that both hands are free. Hand your gear to someone already on the boat or set it down inside the lifelines. When stepping onto the boat get on at the widest part, hold onto the shrouds and then step over the lifelines. Never, ever, jump into, or off of, a boat.

The position of the helmsman (the individual who steers the boat) and the crew (the individuals who do not steer) are important to sail safely and efficiently. The skipper usually stands or sits on the windward side (the side of the boat the wind hits first) and the crew may be asked to move to the high side as well when they're done with their assignments. This helps to balance the boat as much as possible in the water.

If you need to go forward while the boat is underway, move up the windward side of the boat, keep low (crawl if you have to) and always keep one hand on something solid (not the lifelines). Finish what you went forward to do quickly (and safely), then return to the cockpit as soon as possible.

Rules of the Road

- A sailboat will always give way to
 - A disabled vessel or a vessel not under command
 - Vessels restricted in their ability to maneuver
 - A vessel restricted by draft
 - A vessel engaged in fishing
- When one sailboat meets another
 - A boat on a port tack shall give way to one on a starboard tack.
 - If on the same tack, the windward boat shall give way to a leeward boat when on the same tack.
 - A boat that is overtaking shall give way to a boat ahead, regardless to the type of vessels or tack.
 - A boat coming about (tacking) or jibing shall give way to a boat on a steady heading. Thus, if your vessel is the stand-on vessel you are required not to turn or alter course. If the stand-on vessel does alter course it must be to avoid a collision. If your vessel is the give-way vessel you must turn away from the stand-on vessel to avoid a collision.

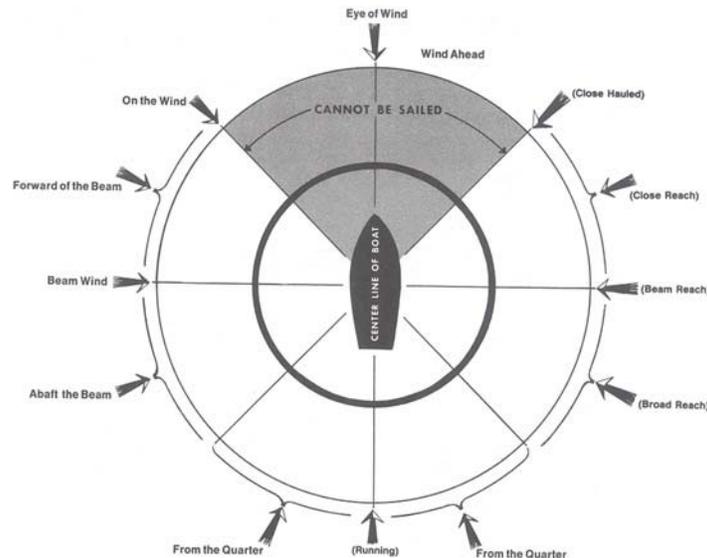
Basic Sailing Fundamentals

Sailboats move through the water by a combination of the force of the wind in the sails and the resistance of the keel in the water. Most of the time, depending on the “point of sail”, the sails on a modern sailboat will also generate lift, much like an airplane wing, and help pull the boat forward.

The natural tendency of a sailboat is to heel, that is to lean away from the wind. In fact, that’s what they’re designed to do. When a sailboat heels, the waterline of the boat increases and that helps the boat go faster. Most sailboats today are designed for a heeling angle of about 20°.

Strong gusts of wind can push the boat over quite a bit and that can be intimidating, but not to worry; the keel, a big chunk of iron or lead, hanging from the bottom of the boat will keep the boat from capsizing.

Changing Directions: Turning the sailboat away from the wind is to fall off or bear away. Turning into the wind is to head up or harden up. As the sailboat falls off the sails should be eased or let out. As the sailboat heads up the sails need to be trimmed or moved toward midline. When one changes the point-of-sail it is advantageous to change the position of the mainsail before or during the maneuver, not after. For example, if one is going to change from a close reach to a broad reach, you should change the sail position before completing the turn or the wind will hit the sail at 90 degrees and may excessively heel the boat.



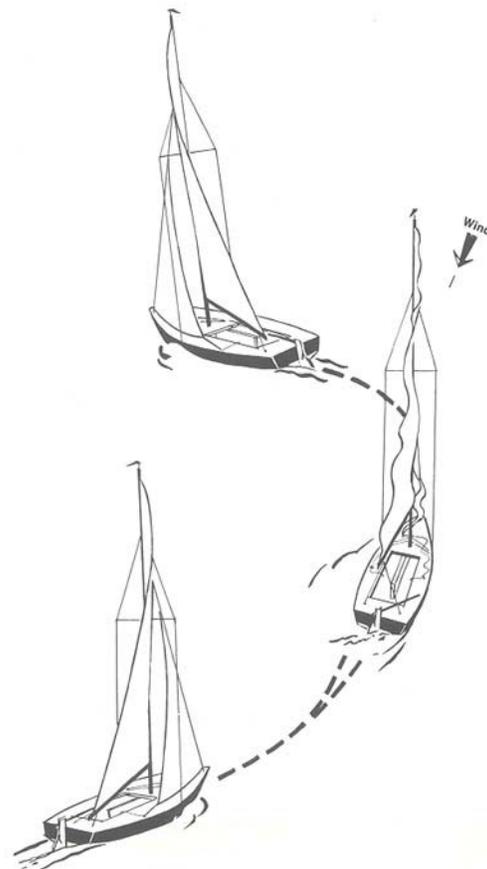
Changing Directions through the Wind: Sailing directly into the wind is impossible and sailing directly downwind is difficult and tricky. There are two basic maneuvers to change directions through the wind — Tacking (Coming About) and Jibing. We use one of these two maneuvers anytime the change in our course causes the wind to change from one side of the boat to the other. Both maneuvers will accomplish this objective. Tacking does so by taking the bow (the pointy end) through the wind. Jibing does so by taking the stern (the other end) through the wind. Which one you choose depends upon a number of

factors. First is the direction you want to turn. Is it easier to turn to starboard (boat's right) or to port (boat's left) to steer to your new objective? If the closer turn takes the bow through the wind, it is generally better to tack. If it is closer to turn downwind and take the stern through the wind, then generally jibing is the desired maneuver. Other factors to consider are wind strength and proximity to obstructions such as shoals, wharfs or other boats. In stronger winds, jibing can be a more challenging maneuver, often intimidating less experienced sailors as well as subjecting the boat and its equipment to serious stress due to the rapid shift of the wind force from one side to another. If conditions warrant we'll probably do what we call a "Chicken Jibe" which is heading up and tacking around the long way.

Tacking: In this maneuver, the bow of the boat goes through the wind as one changes from a close-hauled point-of-sail on one tack (direction) to a close hauled point-of-sail on the other direction. Only the jib needs to be adjusted, the working sheet of the jib is changed and the new working sheet is placed on a winch. The mainsail is left alone and will by itself often assume the correct position.

Commands

- **Skipper** - Ready about!
- **Crew** - Ready!
- **Skipper** - Helm's Alee!
- **Skipper** - Trim to course!



Jibing: In this maneuver, the stern of the boat goes through the wind as one changes from a broad reach on one tack (direction) to a broad reach in the other tack (direction). Both the jib and mainsail will need adjusting. The mainsail is first centered, the turn made and the mainsail is then let out. **Be sure the mainsheet is free to run!** The jib's working sheet is changed and the new working sheet is placed on a winch.

Commands

- **Skipper** - Prepare to jibe!
- **Crew** - Ready!
- **Skipper** - Center the mainsail!
- **Crew** - Centered!
- **Skipper** - Jibe Ho!
- **Skipper** - Trim to course!



One may wish to divide a jibe into a series of steps. First, enter a deep broad reach. This is the point-of-sail just before the jib starts to flap as the mainsail blankets the jib's wind. Turn the boat directly downwind in a run and sail Wing-on-Wing. The jib and jib's working sheet can now be switched to the outer side of the boat and adjusted for the new point of sail. Next, center the mainsail and jibe the boat. Unlike coming-about, in a jibe the boat only needs to be turned a few degrees to allow the mainsail to switch to the other side. Once the mainsail swings to the other side, quickly ease its sheet and trim the main for the new tack.

Finally

It's been said a great day sailing is one that ends with the same number of people you left the dock with and they all have their limbs and appendages in roughly the same condition; and every MCST sail has been a great sail! We plan on keeping it that way.

We encourage everyone to provide feedback to our Staff so we can continue to improve our program.

Email: Charters@sfsailtours.com