BERKELEY ORIENTATION GUIDE

Local Knowledge

Welcome to Berkeley! Right outside our marina is a fantastic playground for sailboats. It has phenomenal views of the Bay, is well within range of great destinations like Angel Island and is largely free of shipping traffic due to its shallow water. Along with its attractive characteristics there are some hazards to be aware of, making local knowledge a necessity to safely enter and exit the marina.

Hazards to Navigation

The Berkeley Pier – avoid sailing within 5 boat lengths of the pier and never sail through any of the gaps in the pier.

The Berkeley Reef – *see chart below in Marina Entrances section to see location of the Flashing Green 2.5s daymark that marks this reef. It should be given a 100ft radius. Never sail to the east and north of the mark.

Rocky lee shore – if a boat for some reason loses propulsion or control it can quickly drift onto the rough Berkeley shoreline. Our procedures for entry and exit reflect this danger and are created to mitigate it.

Restricted Areas

East of a line from Brooks Island to the Berkeley Reef extending to the breakwater.

Outside the Demarcation Line between Point Bonita Lighthouse and Mile Rocks.

This line demarcates Inland vs International Waters. Past this line, insurance will be void and charterers will be liable for 100% of damage to vessel or any persons on board the vessel. Sailing past this restriction will result in immediate termination of certifications and membership.

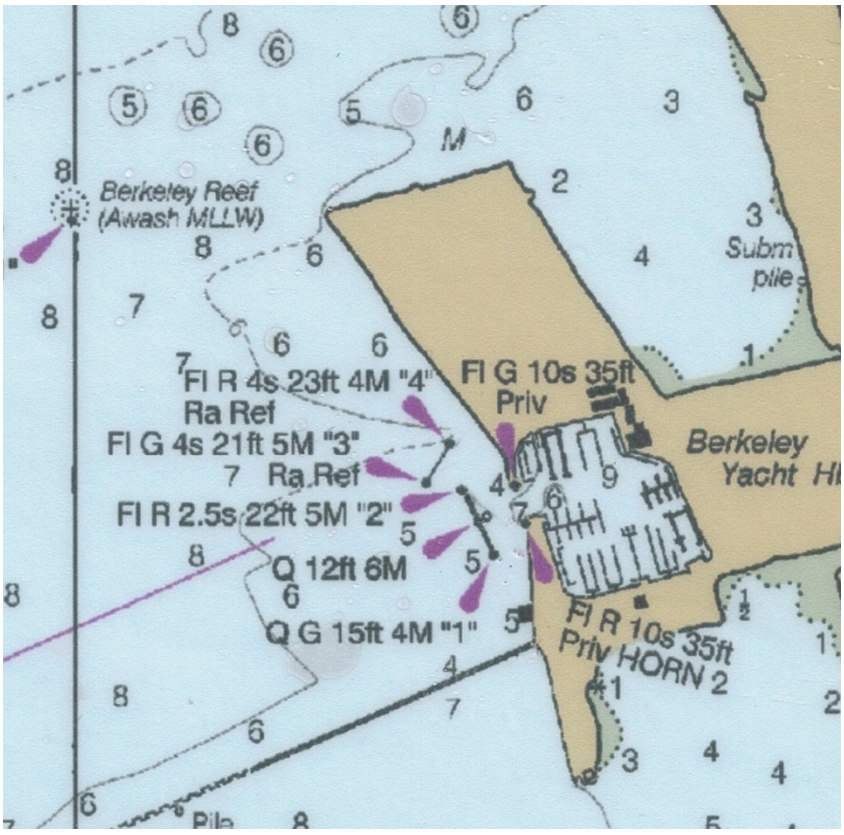
The gap between the standing section of the Berkeley Pier and the ruins of the pier.
To sail to all points south it is necessary go around the Fl R 4s “2” light on the western tip of the Berkeley Pier.

Within 5 boat lengths of the pier.
Give the pier a wide berth. In a northerly wind, stay 500 yards off the pier to reduce the risk of being blown into the pier.

The North Entrance to the Berkeley Marina.
Due to the shape of the shoreline and dangerous wave action off the north break wall, this entrance is off limits to charterers at Modern Sailing.

The Marina Entrances

The marina entrance has a breakwater running parallel to the shoreline as well as a concrete break wall running diagonally from the southwest to the northeast. This creates an entrance to the **NORTH**, a **MIDDLE** entrance, and an entrance to the **SOUTH**. *Note location of the Berkeley Reef located northwest of the marina entrance.



Entering and Exiting:

The **NORTH** entrance is **prohibited.**

The **MIDDLE** entrance is navigable with a +2 tidal height for boats <30ft and with a +4 tidal height for boats >30ft.

The **SOUTH** entrance has the deepest channel and is navigable at nearly all tidal heights.

In many parts of the Bay, we are primarily concerned with tidal *current* with strengths at the Golden Gate running up to nearly 5 kts. In Berkeley you will also need to pay attention to the tidal *height*, which will determine which entrance you decide to enter and exit. During the biggest king tides, larger vessels should avoid entering and exiting at low tide. Due to the shallow bank that extends for miles outside of the Berkeley Marina, the tidal current is very muted with little horizontal movement of the water.

***For boats >30ft, avoid coming in or out within one hour before and after low tide, when the tidal height is less than -1ft.**

***The MIDDLE entrance should only be used when the tidal height is +2ft or greater for boats <30ft and +4 or greater for boats >30ft.**

The Best Paths for Entry and Exit

To avoid the risk of grounding at low tide, this chart shows the best paths in and out of the **MIDDLE** and **SOUTH** entrances. It is important not to "cut the corner" when making the turn around the breakwater. It is best to make decisive turns when entering and exiting that keep you equidistant from the breakwater and the shoreline. *Shaded in red are known areas of shoaling. Most boats that do run aground here, do so because they don't go far enough towards shore and they run aground right inside the breakwater as they are turning in.

A good reference point is the NW corner of Skates restaurant. Continue perpendicular to shore until Skates is nearly abeam. Then turn to parallel the shoreline while keeping the NW corner of Skates directly off your stern.

Berkeley Marina Procedures

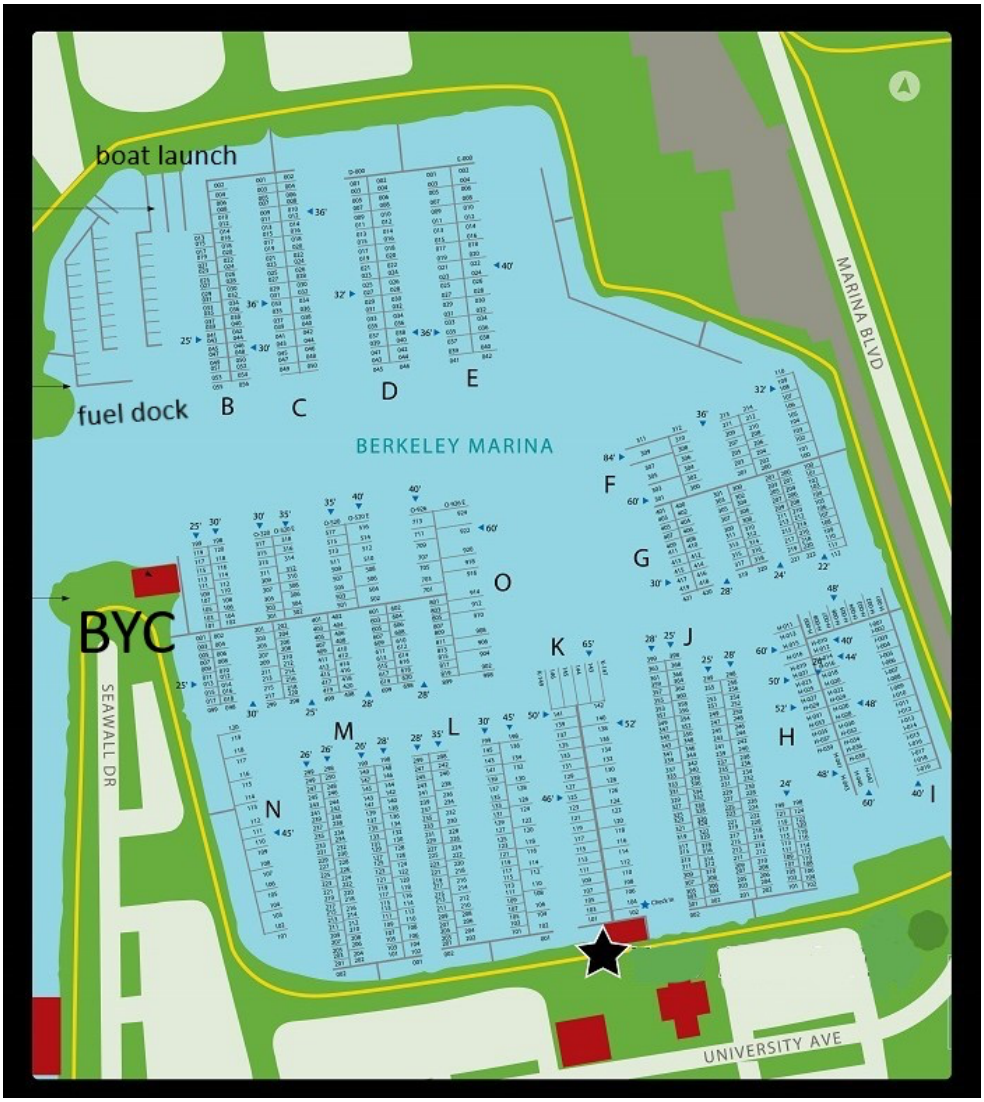
The Berkeley Marina has a large fairway designed to allow sailboats to raise and lower sails inside the marina. This is due to the windy and choppy lee shore conditions that exist right outside the marina

many days out of the year. We've created Marina Procedures for charterers to follow that aid in overall safety, the flow of traffic, and to maintain visibility for the skipper. They were made with our typical strong west to southwest wind in mind, so variations on the exact procedure should be amended by the skipper in conditions that deviate from this.

In your courses and evaluations, you will become familiar with these procedures while on the water, but this guide will be a reference for the what, how and why.

> **Note:** On small sailboats the chop in typical conditions will lift the outboard out of the water with every wave and renders the outboard an ineffective means of propulsion. Due to this, you must be fully under sail to exit the marina.

Below is a map of the marina which marks the fairways and landmarks for your reference. Your Boat Check-out and Check-in Forms will have your slip number on them to help you find your slip upon entry.



Marina Procedures for Boats <30ft

DEPARTING:

- Both sails must be deployed and drawing in order to exit the marina.

- In typical W/SW winds, raise the jib between passing the fuel dock and before you sail outside the breakwater.
    - Don't raise it earlier to both maintain good visibility, and to prevent your jib from flogging as you motor up the fairway.

- Keep the motor going and keep parallel to the flow of traffic while in the fairway as best as practicable.

- When crossing the fairway, motor perpendicular to it and then parallel to the flow of traffic.

- **IMPORTANT:** Note the wind direction and plan when you will tack after exiting the marina. Plan this to keep off the pier and off the lee shore. Don't tack too soon and risk being pushed into the breakwater.

ENTRY:

- If conditions permit, douse and furl the jib before entry into the marina. Otherwise douse the jib between the breakwater and the marina, before entering the fairway.

- Always lower motor and turn it on BEFORE heading down the fairway.

- **IMPORTANT:** In a typical westerly, there is often a sudden wind shift off the Berkeley Yacht club building upon entering the fairway. To prevent an accidental gybe, try to come down the fairway on a **starboard** tack.

- Lower mainsail into the wind, INSIDE the marina. Shake out any reefs.

Marina Procedures for Boats >30ft

DEPARTING:

- Hoist the mainsail inside the marina.

- When crossing the fairway, motor perpendicular to it and then parallel to the flow of traffic.

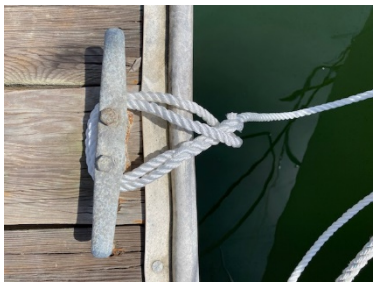
- Motor parallel to the flow of traffic as best as practicable while inside the marina.

- Leave the jib furled until after you have fully exited the breakwater.

ENTRY:

- Furl jib before entering the breakwater.
- Turn on the motor before entering the marina.
- **IMPORTANT:** In a typical westerly, there is often a sudden shift off the Berkeley Yacht club building upon entering the fairway. To prevent an accidental gybe, try to come down the fairway on a **starboard** tack.
- Lower the mainsail into the wind, INSIDE the marina. Shake out any reefs.

Docking in Downwind Slips



Most of our larger boats are docked in double slips so it is required for the crew to off to secure the lines so that the boat doesn't drift into its neighboring boat. Some of these slips are downwind as well. In these downwind slips, we recommend the use of an aft led spring line to help bring the boat alongside safely, giving time for the crew to manage the bow and stern lines with more control over the boat.

During your Berkeley Orientation you will be shown this technique and be given the opportunity to practice it.

For this technique we use an eye splice that has had the tail fed through the end to create a larger loop. The crew person can step off and place this larger loop onto the cleat on the end of the dock without putting their hands between the line and the cleat. The bitter end of this line is led to a winch in the cockpit or to the amidships cleat and then back to the winch if the winches are located very far back in the cockpit (Beneteaus have this feature). Check that it is running correctly under the lifelines. As the helmsperson it will be your responsibility to pull up tension on this line in the cockpit. The boat should be coming in with VERY little remaining forward momentum and this line will load up, bringing the bow into the dock. If the wind is strong, it will take a lot of reverse to stop the boat in addition to the use of this line.

When using the amidships cleat, the stern line should be secured next. If the cockpit winch is used the bow can be secured first and then the stern line.

It is best to demonstrate this technique to your crew BEFORE departure.

Navigating in Fog and at Night

Much of the year our coast has a marine layer (bank of fog) that comes into the Bay and recedes daily. This fog can affect the San Francisco Bay any time of year but is a staple during our summer months. It can come in very quickly and produce extremely low visibility.

If you see fog rolling in, use your compass to get you on a course back to Berkeley and plan this course to exit any shipping channels. If you must cross or remain in shipping lanes to get back, use VHF channel 14 to ask Vessel Traffic Services about current traffic conditions. Vessel Traffic can see any large vessels on the Bay and will help you determine the safest course back.

The ruins of the Berkeley Pier are not lit. You must be aware of where it is using the red light at its western edge, and other local markers to be sure of your position. The lights off the Berkeley Marina breakwater are often the most brightly lit and easiest to find when entering but in fog these will not be visible, so **study the chart and have some rough compass bearings before sailing at night.**

Example Transmission:

> "Vessel Traffic Service, this is sailing vessel *Sirena*. We are located northwest of Alcatraz, in the vicinity of Harding Rock, eastbound for Berkeley. What are the current traffic conditions in the Central Bay? Over."

VTS will respond with any information on traffic in your vicinity, allowing you to plan your return to avoid them.

If you find yourself in fog, make sure to sound your fog signal: **one prolonged blast, followed by two short blasts** when sailing and **one prolonged blast** when under power at no more than a 2 minute interval. Listen for other ships in the fog and slow the boat down.

Now Go Sailing!

Now that you know the basics of sailing out of the Berkeley Marina, go out there and have fun!