

# *Serenity Houseboat*



Standard Operating Procedures for:

## Docking

### I. Safety

- a. Never get between the houseboat and the dock or other larger object.
- b. Always wear PFDs during docking.
- c. Always wear snug fitting, closed toe shoes during docking.
- d. Never step in the bight of a line, you can't be sure when it might come under tension suddenly and pull tight.
- e. When line handling, always keep at least 10-inches of line between your hand and line made off to a cleat. If a heavy load is placed on the line, it can be pulled through the cleat and your hand can go with it, resulting in serious injuries.
- f. Gloves can help prevent burns and injuries, but care must be taken to avoid getting them caught in the line.

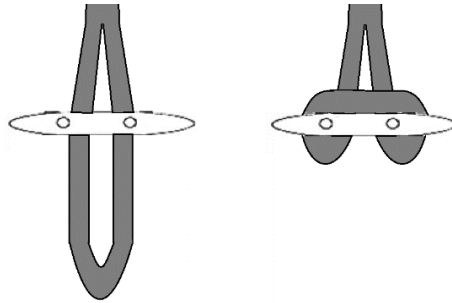
### II. General Information

#### a. Overview

Maneuvering the houseboat up to a dock is one of the most difficult iterations you will face as an owner operator. A good understanding of the physics at work is helpful, but there is no substitution for experience. This SOP is designed to provide best practices in mooring the houseboat at the slip and alongside fuel and pump out docks. It is not intended as an exhaustive study in docking theory, but should provide a good basis for understanding how the mooring process should be accomplished. If you are not confident in your ability to bring the houseboat alongside safely, you are urged to arrange for pilotage services from Aramark Executive Services.

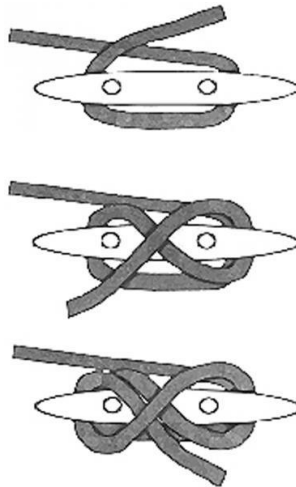
#### b. Basic Terminology

- i. Mooring lines (not ropes) will generally have a loop spliced into the line at one, or both ends, to facilitate quickly making the line off to a cleat. On Serenity, these are ¾-in Double Braided Nylon lines with rated working loads of 18,800-lbs.
- ii. In order to make a line off to a cleat with a loop, pass the loop through the opening in the base of the cleat and then fold it back over the ears of the cleat. This ensures that it will not slip off if the line goes slack.



iii. Making a line off to a cleat.

1. First take a round turn on the base of the cleat.
2. Then take several (3 or more) figure-8 turns over the ears of the cleat.
3. Finally, you may use a locking hitch/half hitch to secure the line in place, but this is not necessary. Under no circumstances should you use a locking hitch prior to taking at least 3 figure-8 turns; if you do and the line comes under heavy tension it can seize such that you will need to cut it off the cleat.

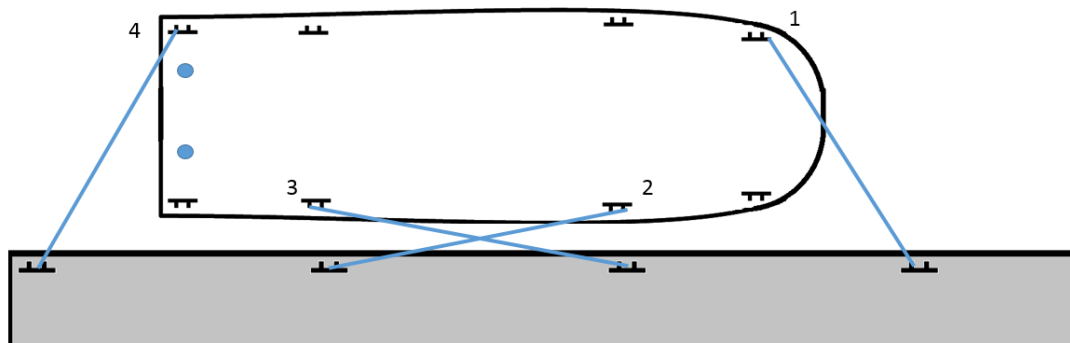


- iv. The most useful knot you can learn is the Bowline. Any knot will be a weak point in the line, but a bowline comparatively reduces the strength far less than other knots (60% of breaking strength of the line). Additionally, a bowline is structured such that it should always be able to be broken and untied.

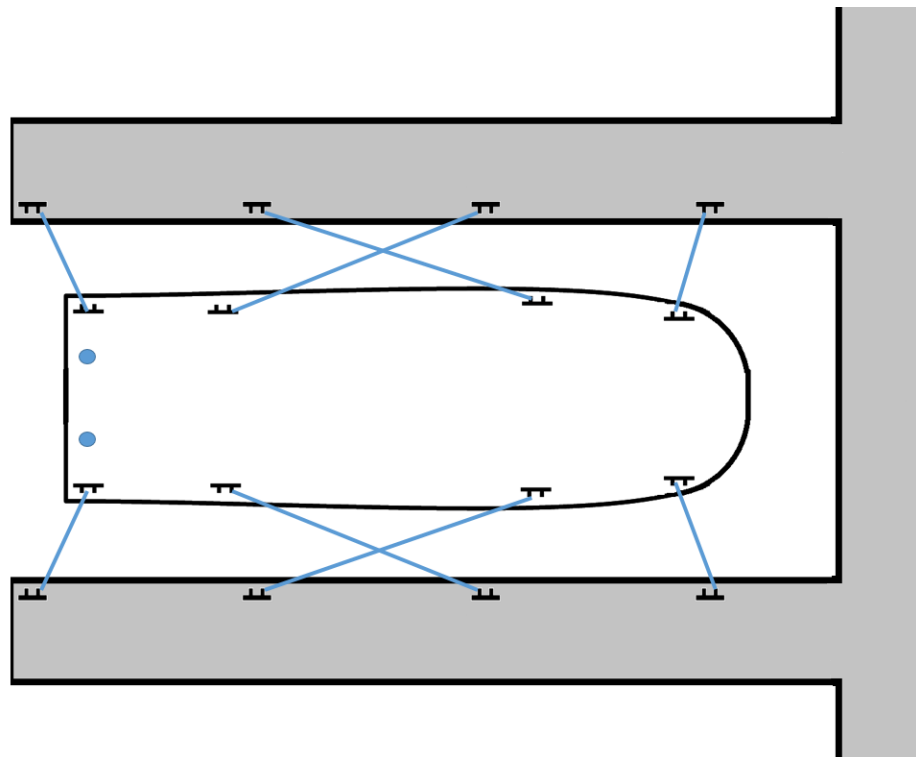


- v. Mooring lines shall be referred to by number, starting at the bow and counting to the stern (1-4). The following lines comprise the normal mooring lines for the houseboat on each side.

1. Line 1 – Bow Line
2. Line 2 – Aft Leading Spring Line
3. Line 3 – Forward Leading Spring Line
4. Line 4 – Stern Line



- vi. Mooring in the Slip. Below is a mooring diagram for the minimum lines that should be used in tying the houseboat up in the slip.



- vii. Engine orders are given as Ahead, Stop, and Back.
- viii. Helm commands are given as Left, Midship, and Right. The term Hard, refers to taking the helm to its stops.
- ix. The vessel's motion is termed as Ahead or Astern and Port or Starboard.

c. Good Practices

- i. Never maneuver up to a dock faster than you are willing to hit the dock.
- ii. The houseboat responds slowly to steering and engine input, there is a lot of momentum to stop; plan ahead.
- iii. Even light breezes effect how the houseboat will handle, approach the dock with wind effect in mind.
- iv. In general, it is desirable to moor starboard side to the dock, as this provides better visibility to the operator at the lower helm station.
- v. It is helpful to send a line handling party with a radio ahead of the houseboat in a small boat. This line handling party can identify where the houseboat will moor and catch mooring lines to tie off the houseboat when it comes in.
- vi. Line handlers should be instructed in how to make off a line on a cleat, how to take up slack in the line, and how to surge or pay out the line.
- vii. Good line handling makes good docking. When line handling, particularly in heavy winds, never try to pull the houseboat with a line. The houseboat weighs 22.5-tons and you will not be able to apply enough force to influence its motion. Use mechanical advantage by immediately making the line off to a cleat with at least one wrap. Take up slack by pulling the line through that wrap or surge the line (pay out line) by allowing it to feed out through the wrap. If you need to hold the line fast, you will have to take more wraps quickly, being careful not to get your hands caught in the line.
- viii. Never enter the marina while towing a small boat or PWC.
- ix. Keep the wind on the bow of the boat, if possible. The engines are more efficient pushing the boat ahead than they are astern and having this greater force to counteract the wind is optimal, even if it results in unconventional docking orientation.
- x. Always have an exit plan; if you have to abort the docking attempt, be ready with how you will maneuver the houseboat back out to open water.

III. Prior to Entering Marina

- a. Prepare mooring lines for heaving; make off the mooring lines to the cleat on the boat and then coil the line for throwing.
- b. Hang fenders on the side of the boat you will be putting against the dock. If mooring at the slip, fenders should be rigged on both sides of the boat, but may be preset in the slip.
- c. Transfer control to the lower helm station; it is illegal to operate the houseboat from the flying bridge in the marina. When coming into or leaving the dock you must pilot the houseboat from the lower helm station to ensure visibility of other watercraft, fixed objects, and people.
- d. Identify who will be doing what during the docking evolution; usually it is best to have one person on the bow and one person on the stern to pass mooring lines and act as lookouts. Review which lines are to be passed and when.
- e. Open all doors in order to have communication and clear pathways for line handlers to move around the boat.

IV. Docking Operations. Docking is one of the most difficult iterations to perform with the houseboat and no two dockings will be exactly alike; each docking will be heavily dependent on prevailing conditions. Take wind conditions into account when planning your approach. Maneuvering the houseboat in close quarters is about balancing forces. As a general rule, if at all possible, approach the dock with the wind on the bow of the vessel so that you can power into the wind (the engines are much more efficient pushing forwards than in reverse). The below instructions are intended as examples of houseboat handling, but you will need to practice to develop these skills.

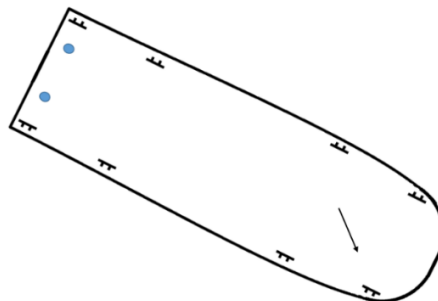
- a. Calm or Light Wind, Docking Starboard Side To. In calm conditions, or even with moderate wind, the simplest method to dock the houseboat is to bring the bow into the dock, pass Line 1, and back the stern into the dock.
  - i. Begin by approaching parallel to the dock about 10-ft off at clutch ahead or slower, by taking the engines in and out of gear to keep a bare steerageway.



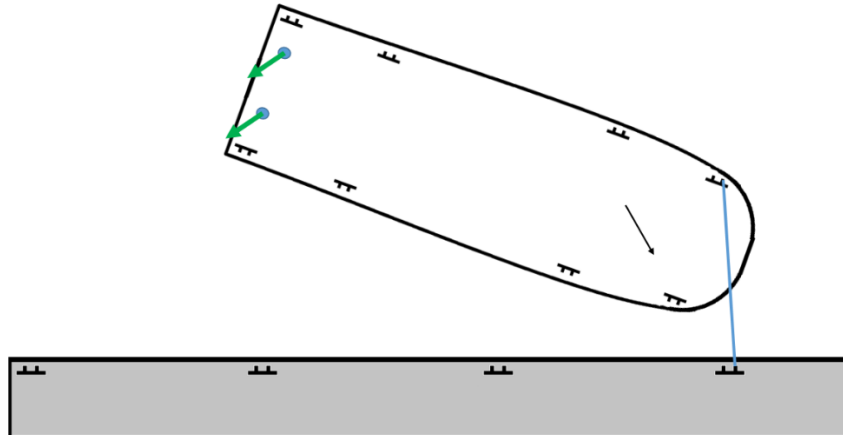
- ii. Bring the engines to ALL STOP and then turn the wheel HARD RIGHT to swing the bow into the dock. You may bump the engines AHEAD if necessary to get the bow up to the dock, but your momentum should carry you into the dock. Remember approach the dock slowly.



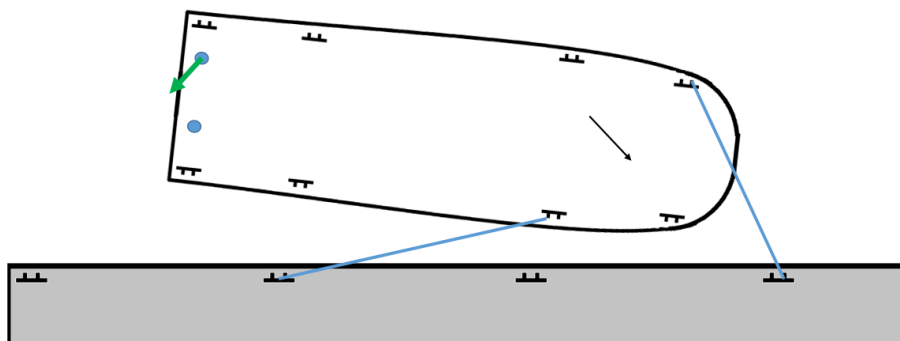
- iii. The bow will swing into the dock and allow you to pass Line 1, the bow line. Line 1 will hold the bow into the dock and allow you to back against it to swing the stern in. You should leave the Helm HARD RIGHT.



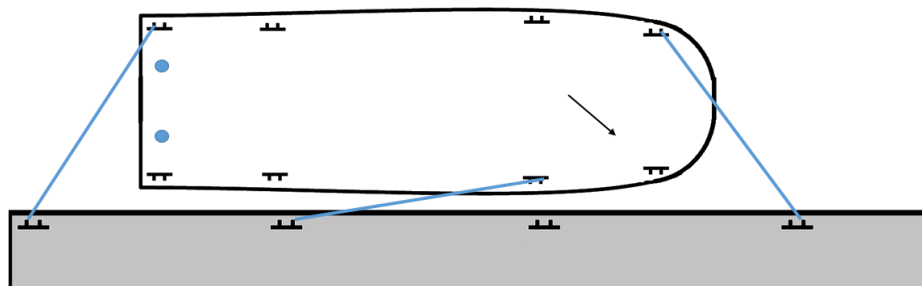
- iv. Once the bow is close to the pier, leaving the helm HARD RIGHT, come ALL BACK on the engines and apply enough throttle to check your forward motion (i.e. put on the brakes). The astern propulsion with the engines in the HARD RIGHT position will also pull the stern in towards the dock.



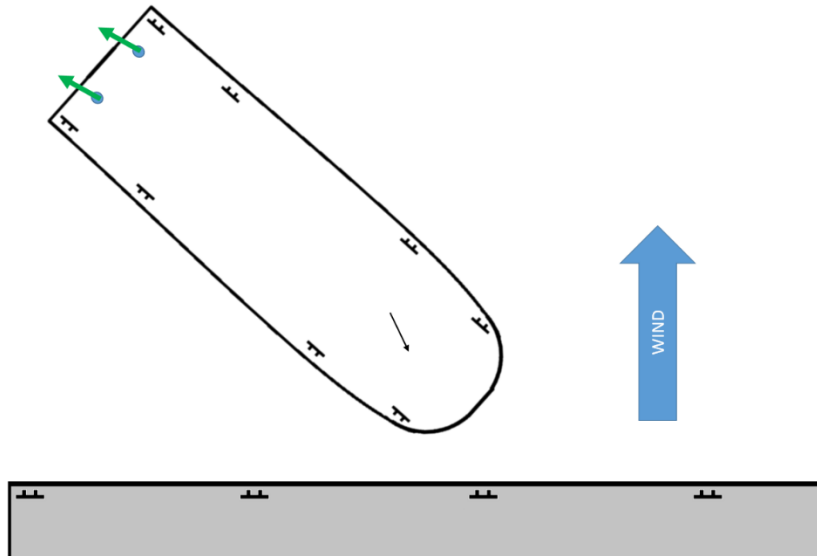
- v. You can bring the Starboard engine to STOP in order to prevent yourself from putting too much strain on Line 1. You should pass Line 2 as soon as you can. Line 2 allows you to spring off the dock, powering forward to pull the boat up to the dock and is helpful if you find yourself in a heavy wind situation.



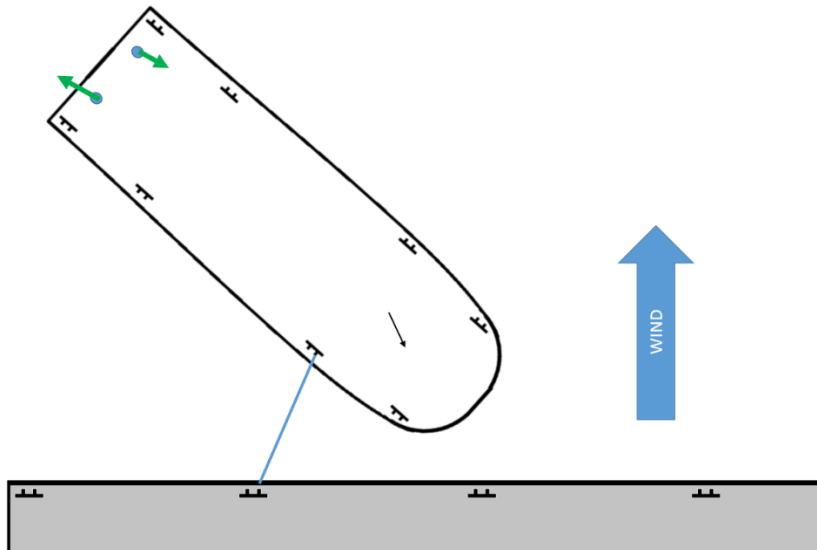
- vi. Pass Line 4 as soon as the stern is close enough to the dock. The houseboat should come to rest against the dock and then can be made off with all mooring lines.



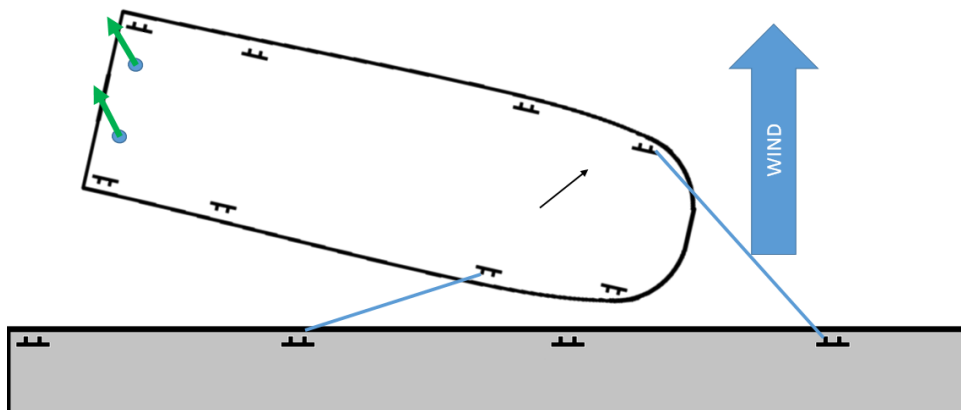
- b. Heavy Wind, Docking Starboard Side To. With very heavy wind, it is likely that you will not be able to apply enough power by backing the engines to bring the stern into the dock, as outlined above. In this case, you will need to use the superior forward thrust to drive the stern into the dock by springing off of Line 2.
- Approach the dock at an angle as steep as is necessary to balance the force of the wind. Make a controlled and slow approach.



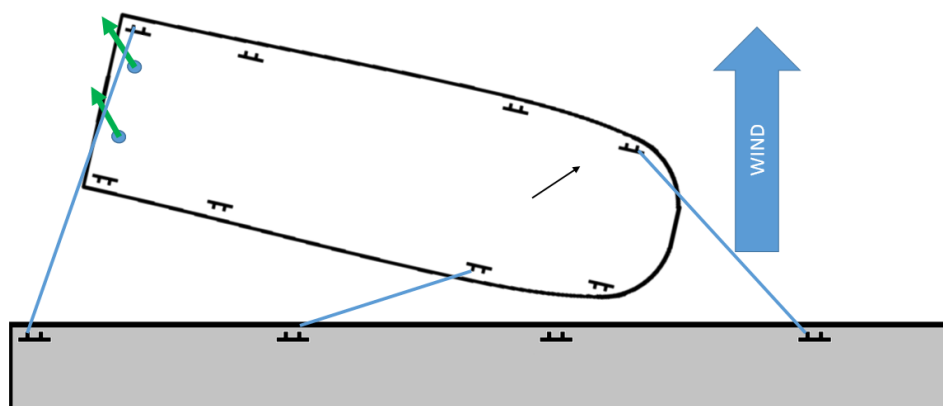
- When close enough to do so, pass Line 2, the aft leading spring line. You may BACK on the Port Engine to slow your approach (put on the breaks) and help twist the stern towards the dock, but take care not to start moving astern as you can quickly be blown off the dock.



- Once Line 2 is secured with several wraps on the cleat, spring forward on line 2 and pass Line 1, the bow line, to hold the bow into the dock. Once you have Line 1 passed and secured with several wraps on the cleat, you can take the helm HARD LEFT and come AHEAD on both engines to drive the stern into the pier. If you don't have Line 1 to hold the bow in, the bow will swing away from the pier and you will be blown off the dock.



- iv. When close enough to do so, Pass Line 4, the stern line. The line handler on Line 4 should take one wrap on the cleat and then take up slack as the engines push the stern closer to the dock. Once the houseboat is alongside the dock, they can secure Line 4 with several wraps.



- v. Keep power on to hold the vessel in position until all lines are secured and made off to hold the houseboat in place.

