



Docking & Harbor Handling Guidelines



TOP 5 THINGS TO REMEMBER

1. Take your time

- a. There is never a hurry to leave the dock or return to the dock. When departing, you can sit at the dock for as long as you like until everything is in place and the crew knows exactly what to do. When returning, you can circle in the harbor endlessly until all lines are in place and you've come up with a plan of how you will approach your slip and have assigned duties to your crew.
- b. Visualize what will happen, how lines will release, look around to see if something looks like it won't flow properly. This is more than a glance; look at each line from working end to bitter end, look at how the crew is holding the line (are the lines balled-up in a "nest" or well coiled and ready to throw?)
- c. If it's windy, wait between the gusts; sit at the dock with the crew ready and just wait for a break between gusts. This isn't fool proof but does work most the time.
- d. MOST IMPORTANTLY – TAKE YOUR TIME!

2. If the boat isn't moving it can't damage anything

- a. DISCLAIMER; "Slow like a Pro" only works if there's almost no wind. You need movement (forward or backward) to effectively steer which is why what we're saying below only makes sense if you're about to collide with something. Otherwise going too slow or stopping a boat in the middle of the fairway only leaves you vulnerable to getting pushed around by the wind.
- b. If a docking goes bad and you cannot avoid a collision – TRY TO BRING THE BOAT TO A COMPLETE STOP – this will make it easy to fend off until the situation can be assessed. It is only beneficial to bring a boat to a complete stop when a docking goes bad and if you cannot safely steer out of the situation. A moving boat is very difficult to fend off and may result in injuring the crew
- c. Know when to quit. In most situations, the right amount of throttle in forward or reverse and the rudder angles will avoid a collision but you have to know when to quit. There will be a time when no amount of throttle or what gear you're in will make it right. This is when you "quit" by just bringing the boat to a complete stop or back out and try again.
- d. IF YOU'RE NOT MOVING YOU CAN'T DAMAGE ANYTHING – it's very easy to hold a boat off of another boat or dock if it is completely still.

3. Know the Difference of Prop Walk & Prop Wash

- a. "Walk" - the stern kicks to port in reverse, kicks to starboard in fwd. Remember, if the stern kicks to port in reverse, it will make the bow go to starboard. Vice versa if the stern kicks to starboard.
- b. "Wash" - only applies to fwd gear as it is the effect that water has when it is thrust over the rudder. "Wash" is the most effective way to force your bow in a certain direction when you are at a dead stand-still.

4. Wind Direction – it will help your docking if you utilize it

- a. Is boat blowing into dock or away from dock?



Docking & Harbor Handling Guidelines



- b. Is it gusty? Can departure be timed between the gusts?
- c. Bow will blow down about twice as fast as the stern – anticipate this and work with it.
- d. Let the WIND be your bow thruster if the situation permits. Sometimes you have to change the situation so that the wind will help. Like ask the marina for a downwind dock or back down the fairway so you'll go into the slip with the bow into the wind.

5. What is your PLAN B?

- a. If the boat does not go where you originally intended, what will you do?
- b. Visualize your Plan A not working out and how you will transition into Plan B.
- c. Anticipate what will most likely happen if your original plan doesn't work out; if the wind overtakes the boat faster than you anticipated, etc.
- d. Share your plan B with your crew. Make Plan B equal to Plan A and whichever Plan you resort to will be exactly what you intended.

THE DOCKLINE THAT WILL CHANGE YOUR LIFE...

The **SPRING LINE**. It's that simple. The sooner you get comfy with it, the sooner you'll take the anxiety out of docking.

1. **Departing a slip** – dock is starboard, the wind is pushing the boat off the dock, you're not sure how to get all the lines and crew on board without getting blown off the dock. SOLUTION:
 - a. Midship spring line going aft. Fenders on starboard side (dock side). Put the boat in gear. Turn the wheel away from the dock. The boat will stay pinned to the dock with just that one spring line on. Now you can walk around and prep and rearrange the other lines for departure.
2. **Arriving to a slip** – dock is to starboard, wind would blow the boat away from the dock. Typically you'd get one dock line on then run around trying to get all the other lines on while the boat gets blown away from the dock. SOLUTION:
 - a. Have midship spring line ready. When entering the slip, this line goes aft to a cleat on the dock. Bring the boat to a stop when the slack is out of the spring line. Then put it back in forward gear, wheel turned away from the dock. This one line will hold the boat perfectly along the side of the dock. And now you have plenty of time to put all the other lines on.

POINTERS

1. Do not use crew like fenders

- a. Tell the crew to keep it safe. Sure they can fend off of a piling or dock when the boat is hardly moving but they should not overdue it. In a bad situation, let the boat take a hit as most people cannot stop the tonnage of a moving boat with their body!



Docking & Harbor Handling Guidelines



2. No reckless jumps!

- a. The crew should not make unsafe jumps on or off the dock in order to secure the boat. If it looks like crew is in going to be in that situation, stop, circle around or do whatever to give yourself more time to make another attempt.

3. Captain should stay at the wheel

- a. Crew releases lines only when captain gives the okay. Captain will use the engine to keep the boat in place as dock lines are released.
- b. Once docked, the captain stays at the wheel until all lines are secured.

4. Do not turn off the Engine until dock lines are secured

- a. Use the engine to keep the boat from moving. Even if it's barely moving.
- b. The engine can run all day long. No need to turn it off too soon as you many need the engine to stop the motion of the boat. Even if the boat is moving slightly forward or aft, use the engine to bring it to a stand-still.

5. Read the surface water in the marina.

- a. On windy days, look at the surface water. You might find that the area around your slip is glassy calm and the rest of the marina is rippled. This indicates a wind shadow. Large boats or structures upwind will provide significant wind shelter.

6. Reversing

- a. Never let go of the steering wheel when going backwards. The wheel can get away from you and slam to the side and could break the steering cable.
- b. This may seem obvious but many times isn't; If you're still moving backward, even the slightest movement backward – you're still reversing! Steer as if you're still moving backwards. Even after you shift to forward gear, if you are still moving backwards, steer for backwards. Don't steer as if you are going forward until you are at a stand-still or are actually moving forward.
- c. Look at something next to you – a dock, another boat, etc - to ensure that you've come to a complete stop.

7. Almost Perpetual Motion

- a. Anytime you pull or push the boat (fending off a piling or pulling on lines) keep in mind the boat will keep moving in that direction long after you've pushed or pulled
- b. If the boat keeps moving, it may move too far and put the boat in a bad position when entering or leaving a slip.
- c. Pull or push the boat with just enough force to do the job. Anticipate where the boat will be in the next 5 to 15 seconds from the result of your push.

8. Releasing Lines

- a. Properly coiled lines will not get tangled
- b. Knotted lines will get stuck on cleats
- c. Use pilings when possible and not cleats with the "boat rodeo"
- d. Look at the docks, pilings, cleats and anticipate problems releasing lines
- e. Captain at the helm always – if the boat gets away and starts moving again, the captain should be at the helm to use the engine to control the motion of the boat.



Docking & Harbor Handling Guidelines



9. Is the Boat moving?

- a. Look at the dock next to you when you are coming or going – if it is moving fwd or aft, even very slowly, it means the boat is still moving and will be a problem. Captain should stay at the wheel to prevent fwd or aft movement.

10. Spring Lines & Breast Lines

- a. Spring lines keep boat from moving fwd or aft
- b. Breast lines keep boat close to dock
- c. A minimum of two spring lines and two breast lines are needed to keep a boat in place. Four breast lines are recommended if cleats and pilings are available opposite the dockside.

11. Function of Spring Lines

- a. Aft spring from fwd cleat – powering fwd pushes stern away from dock and bow into dock
- b. Fwd spring from aft cleat – powering in reverse pushes bow away from dock and stern into dock
- c. If a spring line is released the captain should be at the helm to use the engine now to prevent the boat from moving forward or aft.

12. Function of Bow and Stern Breast Lines

- a. Holds the boat closer to the dock
- b. If marina dockhands are not present, crew must hold the boat to the dock with “looped” dock lines and be prepared for quick, easy release.

13. Train your Crew

- a. A botched docking is always the fault and responsibility of the skipper, regardless of what the crew did
- b. Train your crew how to “boat rodeo” (throw lines, quickly coil, etc).

DEPARTING A SLIP

1. Wind Direction
2. Prop Walk / Prop Wash
3. Your Plan A and Plan B based on these above factors
4. Crew Support – line throwing (boat rodeo)
5. Fenders Up – pilings can grab fenders and undermine a departure or cause damage
6. Order of Releasing Lines
 - a. Changes with wind direction and dock situation
 - b. Crew should never release lines without captains permission
7. Placement of boat in slip just before departing
 - a. A gentle push off or pull to will better position the boat before putting the engine in gear.
 - b. Don’t set yourself up for failure! If the boat is badly positioned in the slip and you start to reverse, it will cause problems.

HARBOR HANDLING

1. Check the Brakes – stopping practice
2. Gradual slow down – making fwd headway with engine in reverse to maintain steerage and while getting rid of speed more quickly than neutral.



Docking & Harbor Handling Guidelines



3. Quick stop – “coming in hot” and losing all forward momentum fast to bring the boat to a complete stop.
4. Radius of a quick turn into Windward
5. Radius of a quick turn Downwind
6. Clockwise turn, boats own length
7. Counter-Clockwise turn, boats own length
8. Reversing in a straight line and coming to a stop

T – DOCKS (SIDE APPROACH)

1. Direction of the wind. Docking upwind or downwind?
2. Prop walk going towards dock or away from dock?
3. Marina dockhand there to assist? If not, is the crew prepared for “boat rodeo”?
4. Fenders on deck – do not hang if pilings are present on the dock as they can grab fenders and cause damage.
5. First line on
 - a. If it is the spring line, make sure the dockhand knows to run the line aft. Use aft run spring to help bring bow into the dock.
 - b. If first line on is bow line, stern will be able to blow off dock. Reversing with bowline on will bring stern into the dock *but only when that bowline’s angle is going forward*.
 - c. If it is the stern line, the boat can be gently powered forward to bring midship and bow into the dock.
6. Approaching a T dock in high winds blowing off the dock
 - a. Come in with the bow angled much closer to the dock than the stern.
 - b. Veer the bow away from the dock after getting it close enough to throw a line or loop a piling
 - c. By veering the bow away, the stern and midship will now be angled closer which makes it a good time to secure those lines.
7. Approaching a T dock in high winds blowing into the dock
 - a. Approach with adequate headway. Stopping or going too slow will cause the bow to get blown down into the dock. Use quick stop technique.
 - b. Bring the boat to a complete stop a few feet off the dock with the bow angled slightly up into the wind. The wind will blow the boat into the dock gently, the bow will blow down faster than the stern.
 - c. By initially stopping with the bow angled slightly upwind, the boat will be straight by the time it blows into the dock.
8. Docking at a T dock with the bow into the wind will allow for a much easier departure as the wind can blow the bow off the dock. Docking with the stern into the wind will be more difficult to keep the stern clear of the dock when departing.

APPROACHING A SLIP

1. Direction of the wind
 - a. Blowing into the dock;
 - i. If the wind is blowing onto the dock, picture bringing the boat to a stop in the slip a few feet off the dock and let the wind gently drift the boat into the dock.



Docking & Harbor Handling Guidelines



- ii. Keep the bow high! Keep the bow angled away from the dock, more than the stern because the bow will blow down into the dock at a faster rate than the stern.
 - b. Blowing off the dock;
 - i. At first, point the bow in towards the dock then veer away from the dock. This will allow a bow to temporarily get close enough for a line to be thrown or looped on a piling. Then veering away will bring the bow away from the dock and the stern closer and then the stern can be secured.
- If possible, approach the slip from downwind, so you are moving forward with the bow into the wind.
- 2. Prop walk going towards dock or away from dock?
 - a. Angle the boat in the slip according to how the prop walk will kick the boat into position when coming to a complete stop.
 - 3. Marina dockhand there to assist? If not, prepare crew for “boat rodeo”
 - 4. Fenders on deck – do no hang if pilings are present on the dock as they can grab the fenders and cause damage.
 - 5. First line on – should be spring line (run from midship cleat going aft) but look at the situation and see if that will work.
 - 6. Other options for first line on:
 - a. If first line on is bow line, stern will be able to blow off dock. Reversing with bowline on will bring stern into the dock *but only when that bowline's angle is going forward and the line tightens up.*
 - b. If it is the stern line, the boat can be gently powered forward to bring the midship and bow into the dock *but again, only when the stern line is tight and angled aft.*
 - c. If it is the spring line, make sure the dockhand knows to run the line aft. Use aft run spring to help bring bow into the dock.
 - 7. The captain should not leave the helm and the engine should not be turned off until the last line is on and the boat is secure.