Good Docking: An Overview

Good Docking Requires More than Driving the Boat Up to the Dock

By Mike Huston

Docking is a complex subject. Additionally, parts of the process are not easy to describe in written words – for example the 'touch' involved in driving the boat up to the dock. For these reasons it became apparent I could not cover this subject, and do it justice, in one article. So, I decided to start with an overview. However, where there was room, I have included specific ideas and tips. Some other concepts have been covered in prior articles and references to them are provided where appropriate. And, I plan on adding more detail in next month's article. So, let's dive in.

As I see it there are five components to docking:

Planning – *where are we docking and what are the conditions (wind or current)?*

Preparation – *setting up lines, fenders and crew.*

Momentum Control – *getting the boat lined up and into the dock in a controlled fashion.*

Line Handling and Securing – *the transition from moving to tethered.*

Communication and Coordination – *key to getting the first four items done smoothly and competently.*

Making a bad mistake with or omitting any one of these will likely lead to a poor docking, especially in bad conditions. Messing up on two or more can lead to an ugly docking, damage or injury.

Let's look at each in some greater detail:

Planning

If you are headed into your home port this part is usually pretty easy. Most of the time, a review of the weather and current conditions is all that is required. If there is more needed you will know about it.

If, however, you are headed into an unfamiliar port it is a good idea to gather some information. Here is my check-list:

- ✔ Read the cruising guide to gather several pieces of information:
- ✔ Navigational tips and tricks to the harbor entrance
- ✔ Contact info for the harbormaster – radio channel or phone number
- ✔ A layout of the docks, if provided
- ✔ Check on the availability of power, water, fuel and other desired services.
- ✔ Check the charts to get the lay of the place – such as, the location of buoys and depths to be expected. If tidal issues or currents are likely, look these up so you know what to expect.
- ✔ Call in for a slip assignment and, if you need them, directions to it. When you do this it does not hurt to state your preferences. For example, we usually say something like, "We would like a slip for one night for a 43' sailboat; bow-in, port tie if possible." Be prepared for an answer something like, "You may take any open slip on G dock," as many harbors lack the manpower to actually assign slips.

Preparation – This is the process of physically preparing the boat to dock, in other words putting out the dock lines, fenders and any other needed gear (like a fender step). The decks should be cleared of loose gear and the sails should be securely tied. It is not helpful to have an unexpected gust of wind catch a loose sail or have a crew member trip over a loose line.

This is also the time to make assignments to the crew – who is doing what and when. And if you have an extra fender and crew person I recommend setting up a "roving fender." His or her role is to put the fender between the boat and anything it might unexpectedly hit. Having this person stand in front of the mast seems to work well as they are out of the skipper's line of sight during the final approach and can quickly get to either side of the boat.

There are some "tricks" to setting up a boat for docking but I don't have room in this article to go into them in detail. However, these tips were the subject of an earlier *Sailing Tips* article. It is available online for review at www.48north.com/articles.comhtm look in the April 2010 issue, page 40.

Momentum Control

This is a fancy way of saying boat handling. It is the area of docking where prior knowledge and experience are the most valuable. That being said, in calm conditions almost anyone can get a boat into the slip – just take it slow. But as winds or currents come into play, or if the unexpected should happen, being able to competently control the boat becomes an imperative. And, believe it or not, knowing what you cannot get the boat do to is probably more important than knowing what you can. Think about it — trying to get a boat to do something it cannot is guaranteed failure waiting to happen.

Handling a boat in close quarters, including docking, requires knowledge and skill with several tools: among them are the throttle, gear shift, prop walk, prop wash, dock lines and crew. Each of these tools has an important role to play. Two of these areas, dock lines and crew are discussed in this article. I'll save the others for another article. Fortunately, they were covered in an earlier series of three ***Sailing Tips*** articles titled *Close-Quarters Maneuvering*, which is exactly what docking entails. These articles explain the basics of boat handling and

give specific exercises for practicing them. They are also available online – same the 48° North website archives as above, see the January, February and March 2010 issues, pages 42, 32 and 40 respectively. I sailed for 30 years before I learned and really understood much of this material – so even if you are reasonably experienced they are worth a look.

But there is more to docking than just being able to competently handle a boat. There are some specific techniques for approaching the dock that I would like to share with you but cannot in this overview. However, these will be the subject of next month's article.

One final thought on this subject; in order to dock competently one needs to have a feel for the boat. How quickly does it turn? How quickly does it stop? How much prop walk does it have? If you are on a boat you do not know – say a charter – find a safe place and do some turns and spins. Back up a bit, stop and start – in other words, get a feel for the boat. A few minutes spent practicing under controlled conditions may save you a lot of grief when unexpected things happen.

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Line Handling and Securing the Boat

This phase of a docking starts when the boat gets close enough to the dock to toss a line to someone or for one of your crew to get off the boat with a line. It is also when the most coordination between crew and skipper is needed.

In calm conditions this phase is usually pretty straight forward – get the boat in the position you want and secure it with a bow line, stern line and two spring lines (normally). But if the wind is blowing the boat off the dock this is a crucial moment.

Even though this is an overview I would like to share one specific technique that can be very helpful when docking in adverse conditions. To make the point, let's look at a docking where the wind is blowing across the dock — one of the harder docking situations.

Here is the idea: Have your first crew off leave with a spring line in hand, this line should be attached at the mid-ship cleat. Their main task is to get this line hooked (not cleated) around a cleat – preferably one near where the stern of the boat will eventually be located. Initially they can let the line slide through their hands but as the boat nears its resting place this line should be drawn tight and cleated.

The skipper should then put the boat in forward at an idle (maybe slightly higher) and turn the wheel to starboard. How much will vary from boat to boat and on conditions; it might even require some port rudder. But with this one line attached and the engine in gear the boat should stay nicely in position. *Figure 1* shows what this arrangement looks like. The line will be pulling the boat toward the dock and trying to twist the bow to port. The engine is used to create the pressure and the rudder, and the resulting prop wash, are used to correct for the twist. By varying the engine RPMs and rudder it should be possible to keep the

boat straight and against the dock. This really does work and will make windy dockings a lot easier.

Once this balance is in place there is no need to hurry or panic; you can calmly go about securing the rest of the dock lines. When they are secured the engine can be put in neutral and turned off.

Communications and Coordination

While it is possible to dock a boat single-handed, at least in calm conditions, this is not the norm. Therefore, coordinating the actions of one other or more people is usually a necessary part of docking. This starts with preparing the boat and continues all the way though securing the boat. The best thing you can do is practice with your crew in calm conditions. But short of that, clearly explaining each crew member's role will help.

Here are some thoughts on what should be communicated:

- ✔ Clearly state how you want the boat setup for docking, where the lines should be tied, where the fenders should go, etc. It is a good idea to stop the boat outside the harbor, or just inside if there is room, and look things over (examples I have seen include having fenders too high and missing bow lines).
- ✔ I think it is best to have your most experienced crew person who is physically able take the first line ashore. While experience can usually make up for not being nimble, physical abilities can come in handy. In fact, many of the really experienced cruising couples we know have the ladies drive and the gentlemen handle the lines in bad conditions.
- ✔ The coordination between this crew member and the skipper is also important. Simple things like announcing when the line is around the cleat or bull rail helps the skipper. A simple "You're hooked" or "I'm ready to snug when needed" will do. The skipper should be equally vocal in asking for the line to be snugged or cleated.
- ✔ While maneuvering in marinas the crew should look for potential hazards. Look for things like moving masts or boats pulling out of slips and point these out to the skipper.
- ✔ Don't forget to turn to the person you are talking to or they may not be able to hear you. For example, if you are on the bow and say something to the skipper while facing forward it is likely you will not be heard.

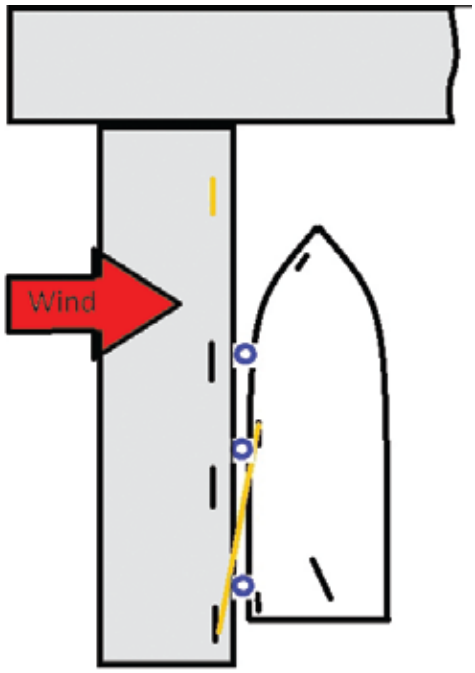

Figure 1: *A technique for wind blowing across the dock has the line pulling the boat toward the dock and trying to twist the bow to port. The engine is used to create the pressure and the rudder, and the resulting prop wash, are used to correct for the twist. By varying the engine RPMs and rudder it should be possible to keep the boat straight and against the dock.*

The best thing you can do to improve your docking skills and those of your crew is practice. There are also classes that you can take on docking. The school I teach at holds all day docking clinics several times a year and I suspect other schools have something similar. The clinic is inexpensive and is an excellent way to learn and practice the skills that make boat handling and docking much easier. And taking your crew to the clinic with you will really help coordination and communication.

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