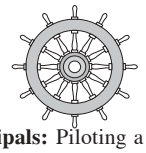

# Basic Boat Maneuvering

**Basic principals:** Piloting a boat is not at all like driving a car. With a car, the front end moves right or left as one steers, and the back end usually follows obediently. Not so with a boat. Instead, the stern does the moving, to port or starboard, as one turns the wheel. Thus, the stern must be kept free of obstacles on either side.

As if this is not enough of a problem, the water underneath a boat is not a stable substance, like a highway. The water moves about with the current, usually either helping or hindering efforts to control the boat. Add to these variables, the unpredictable local winds inside small harbors and the close quarters that are frequently encountered, and it's no wonder that many yacht captains have Excedrin headaches.

Not that captains are the only ones who get headaches from maneuvering. Almost any first-mate, given two martinis and an opportunity to speak, can relate at least one instance when her marriage, if not her very life, was called into question by her captain shouting, "Now what did you do to make the boat do that?" It is from the frustration of such instances that even the most patient first-mate is sometimes on the verge of a nervous breakdown.

**Speed:** Perhaps the most frequent mistake novice boat handlers make is to use too much speed. A boat speeding about in tight quarters is almost sure to get in trouble and to do serious damage when it does. A captain proceeding slowly and cautiously can usually recover from a mistake with little more than embarrassment by simply pushing off the boat or other object into which he has been carried. There are times, or course, when wind and current require modest amounts of speed in order to maintain headway or sternway. Extreme caution is required at such time.

**Observations:** Take note of the direction and strength of the wind by observing flags located ashore and on boats. A boat that has a relatively flat bottom will be more affected by wind than current. With a deep V-hull, however, the current will affect the boat more than the wind. Which way the current is going to be flowing can sometimes be determined by knowing whether the tide is flooding or ebbing. Sometimes one can actually see the current in the water, or can see an object, such as a piece of drift wood, moving with the flow. Observe how the current is affecting other boats that are maneuvering in the same area. One can make a trial run and note the effect of the current on his boat. The important thing is for the skipper to take time to decide the best approach, given the present wind and current conditions. Strong preference should be given to heading into the wind or current as over against having it at the stern. When landing, it is also preferable to have the wind and current push the boat in toward the dock, rather than away from it.

**Backing away from trouble:** Many boaters get in trouble because they decide what they're going to do and then they keep on doing it, even though they can see that things are going wrong. It is best to abort a maneuver that is obviously getting the boat into trouble, by reversing engines and backing out into more open waters to make a change in plans or a better approach.

**Docking to port side:** The single-screw Yachtsman will tend to favor bringing his boat into the dock on the side to which the rotation of the propeller will bring the stern of the boat in toward the dock when the engine is in reverse. With a right-hand (clockwise rotation) propeller, this is the port side. The reason for this is that when the boat has headway and the engine is in reverse the stern will be driven to port without regard to the position of the rudder.

**The down-wind or down-current landing:** When this landing is a must, have a stern line ready to throw ashore as soon as possible. With the stern secured, the bow will be brought into the dock by the pressure of the wind or current. To secure the bow first is to risk being turned end-for-end.

If the wind or current is from the stern, turn the propeller slowly in reverse to hold against current or wind, with rudder only slightly to port. The stern will come in first, so an after-quarter spring line should be secured first.

**Leeward-side landing:** Occasionally it is impossible to land with the wind blowing the boat onto the dock or it is advisable not to make much a landing because strong winds and seas may damage the boat against the dock. This is a difficult maneuver. The correct way is to approach the dock bow first, with enough headway to hold her into the wind. As the bow line is thrown ashore, engines are reversed to stop headway. Then, when the bow-spring line is secured, the rudder is turned to starboard, with engines in forward, just enough to move against the wind. As soon as possible, a stern line is thrown ashore.

**Getting away from a float:** If either wind or current pushes the boat off the dock, it is a simple matter to take the lines loose and let these forces carry the boat away from the dock.

If the wind or current is holding the boat into the dock, an after-bow spring line is used. The boat goes ahead on the spring with the rudder set toward the dock. This swings the stern clear allowing the boat to back into the wind.

The same technique may be used if the wind or current is from the stern of the boat. When the stern is out 45-90 degrees from the dock, with the engines in neutral, the bow line may be cast off. If onshore help is not available, the after-bow spring line may be doubled, so that it comes free and may be hauled aboard when one end is let loose aboard.

When the wind or current is from the bow of the boat, a forward-quarter spring is used in the same manner to hold the stern in and let the bow swing out away from the dock.

**Using twin screws:** By putting one engine in forward and the other in neutral or reverse, a twin-screw boat may be turned around in her own length with the rudder amid-ships. Once this technique of steering with the throttles is mastered, the twin-screw captain will have better maneuverability with his boat than with a single-screw.

**Inboard-outboard/outboard:** The inboard-outboard and outboard will maneuver in the same manner as the single-screw inboard, except that the skipper will have more control over the boat, because the rudder and propeller are both being turned by the wheel.

**Well-meaning dock helpers:** There are times, such as when the wind is blowing the boat off the dock during landing, or onto the dock during the get away, when on-shore help is much needed. It is the captain's responsibility to give the correct instructions to these helpers, who may be more well-meaning than knowledgeable. When a get-away problem is anticipated before leaving the dock, it is a good idea to enlist help and to plan together the strategy to be used, so that the captain, first mate, and dockhand all have a clear understanding of who is to do what and when. Difficult approaches are more on a catch-as-catch can basis. At times like these, it is especially important that the captain and first mate have agreed as to the procedure. The first mate may be the only person close enough to a dock hand to yell instructions.

When winds and currents are calm or after the captain and mate have mastered the art of landing and departing, a well-meaning dock hand may be a detriment. Many a skipper has planned and executed his approach impeccably, only to have someone on the dock yank on a line and throw his yacht into an unexpected trajectory. If the bow line is pulled upon, the stern will leave the dock. If the stern line is pulled upon, the bow will be out of control.

What do you tell some kind person, who runs down the dock to help you? It is helpful if the mate understands the captain's plans and can interpret them to such a helper. When landing in good conditions, it is a good idea for the mate to hand the line to the dock helper and ask him to hold it, but not to secure it or pull on it, unless, or until, the captain asks him to do so.