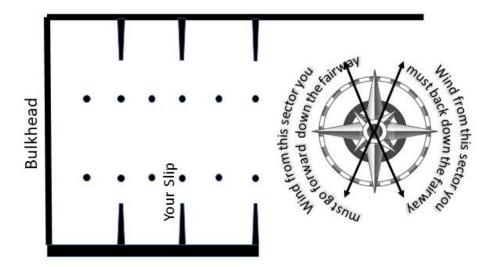
## Windward Passage Procedure for Backing into a Slip



As you enter the marina observe the wind direction by looking at the wind indicators on sailboats in the slips. The strategy is to approach your slip down the fairway with the wind in front of your beam (If the wind will be off your beam see items (5) and (6) below). This will allow the wind to aid you in making the turn into the slip at slow speed. There are six situations to consider:

### 1. The wind is blowing down the fairway away from your slip and your slip is to your port side

- a. Approach your slip at slow speed (less than one knot) about 5 feet from the pilings on the port side of the boat and with crew stationed at the stern of the boat with dock lines available
- b. Begin to turn sharply away from the slip just as the bow reaches the downwind outer piling and put the throttle control in reverse
- c. As the boat turns and slows the wind will push the bow to starboard and the reverse propulsion will crab the stern to port
- d. As the boat becomes perpendicular to the fairway it should be slowly backing toward the entrance to the slip
- e. Turn the wheel hard over in a **counterclockwise** rotation. At these slow speeds, the rudder has essentially no effect on the direction the boat is traveling but the propeller will make the stern move to port. If it is necessary to move the stern to starboard, very quickly move the throttle control to forward in a quick burst and immediately move it back to reverse. With the wheel positioned hard over **counterclockwise** this short, powerful burst of water will kick the stern of the boat to starboard. The trick is to not hold the throttle in forward so long that the boat begins to move forward but long enough to give the rudder a good kick to starboard.
- f. Once the stern is inside the outer pilings continue to back slowly (with the wheel still hard over **counterclockwise**) with occasional forward throttle burst to kick the stern to starboard.
- g. The crew should walk forward as the boat backs in, staying at the outer piling and attaching the dock line. When the boat is fully in the slip they should cleat the dock line taut when the helmsperson tells them to.
- h. A forward and an aft spring line should be deployed along with the stern dock lines.

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### 2. The wind is blowing down the fairway away from your slip and your slip is to your starboard side

- a. Approach your slip at slow speed (less than one knot) about 5 feet from the pilings on the starboard side of the boat and with crew stationed at the stern of the boat with dock lines available
- b. Begin to turn sharply away from the slip just as the bow reaches the upwind piling and put the throttle control in reverse.
- c. You should be a little upwind from the centerline of the slip when the boat comes to a stop.
- d. As the boat turns and slows the wind will push the bow to port and the reverse propulsion will crab the stern to port.
- e. As the boat becomes perpendicular to the fairway it should be slowly backing toward the entrance to the slip
- f. Turn the wheel hard over in a **counterclockwise** rotation. At these slow speeds, the rudder has essentially no effect on the direction the boat is traveling but the propeller will make the stern move to port. If it is necessary to move the stern to starboard, very quickly move the throttle control to forward in a quick burst and immediately move it back to reverse. With the wheel positioned hard over **counterclockwise** this short, powerful burst of water will kick the stern of the boat to starboard. The trick is to not hold the throttle in forward so long that the boat begins to move forward but long enough to give the rudder a good kick to starboard.
- g. Once the stern is inside the outer pilings continue to back slowly (with the wheel still hard over **counterclockwise**) with occasional forward throttle burst to kick the stern to starboard.
- h. The crew should walk forward as the boat backs in, staying at the outer piling and attaching the dock line. When the boat is fully in the slip they should cleat the dock line taut when the helmsperson tells them to.
- i. A forward and an aft spring line should be deployed along with the stern dock lines.

## 3. The wind is blowing down the fairway toward your slip and your slip is to your port side if you were to proceed down the fairway in forward

- a. This situation requires that you back down the fairway (and the slip will now be on your starboard side). You need to understand that the boat crabs strongly to port when in reverse at slow speeds. The only way to move the stern to starboard when in reverse at slow speeds is to get some speed in reverse and then put the throttle in neutral and steer with the wheel fully clockwise. At slow speed you can just keep the wheel fully clockwise with the throttle in reverse and when you need to go to starboard, put the throttle in neutral. If you still need to steer more strongly to starboard you may have to quickly turn the wheel hard counterclockwise and put the throttle control quickly in forward with a quick, hard thrust to kick the stern to starboard then quickly turn the wheel back to hard clockwise.
- b. Proceed down the fairway at slow speed (less than one knot) keeping to the center with the wheel turned hard **clockwise** alternating between reverse and neutral to steer until the stern just reaches the middle of your slip then turn the wheel hard **counterclockwise** and give a short burst forward to stop the boat and kick the stern to starboard. The wind will be pushing the bow to port. With the wheel fully **counterclockwise** you can kick the stern to starboard with quick, hard burst of forward throttle. Use the port crabbing of the propeller to move the stern to port. Use this combination to align the boat with the slip and back into the slip.

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- c. Once the boat is entering the slip, keep the wheel hard over in a **counterclockwise** rotation. At these slow speeds, the rudder has essentially no effect on the direction the boat is traveling but the propeller will make the stern move to port. The wind will be pushing the boat to port. If it is necessary to move the stern to starboard, very quickly move the throttle control to forward in a quick burst and immediately move it back to reverse. With the wheel positioned hard over **counterclockwise** this short, powerful burst of water will kick the stern of the boat to starboard. The trick is to not hold the throttle in forward so long that the boat begins to move forward but long enough to give the stern a good kick to starboard.
- d. The crew should walk forward as the boat backs in, staying at the outer piling to fend the boat off the piling and attaching the dock line to the piling when appropriate. When the boat is fully in the slip they should cleat the dock line taut when the helmsperson tells them to.
- e. A forward and an aft spring line should be deployed along with the stern dock lines.

# 4. The wind is blowing down the fairway toward your slip and your slip is to your starboard side if you were to proceed down the fairway in forward

- a. This situation requires that you back down the fairway (and the slip will now be on your port side). You need to understand that the boat crabs strongly to port when in reverse at slow speeds. The only way to move the stern to starboard when in reverse at slow speeds is to get some speed in reverse and then put the throttle in neutral and steer with the wheel fully clockwise. At slow speed you can just keep the wheel fully clockwise with the throttle in reverse and when you need to go to starboard, put the throttle in neutral. If you still need to steer more strongly to starboard you may have to quickly turn the wheel hard counterclockwise and put the throttle control quickly in forward with a quick, hard thrust then quickly turn the wheel hard clockwise.
- b. Proceed backing down the fairway at slow speed (less than one knot) keeping to the center with the wheel turned hard clockwise and alternating between reverse and neutral until the stern just reaches the upwind piling for your slip then turn the wheel counterclockwise and steer the stern into the slip with the wind helping to push the bow to starboard. If necessary to kick the stern to starboard turn the wheel hard over counterclockwise and give a short burst in forward.
- c. Once the stern is inside the outer pilings continue to back slowly (with the wheel hard over **counterclockwise**) with occasional forward throttle burst to kick the stern to starboard.
- d. The crew should walk forward as the boat backs in, staying at the outer piling to fend off the piling and attaching the dock line when appropriate. When the boat is fully in the slip they should cleat the dock line taut when the helmsperson tells them to.
- e. A forward and an aft spring line should be deployed along with the stern dock lines.

#### 5. The wind is blowing out of your slip toward the fairway

- a. Proceed in forward down the fairway at slow speed (less than one knot) about 5 feet off the pilings on the slip side of the boat until the bow reaches the first piling for your slip then turn hard away from the slip and put the throttle in reverse.
- b. Once the boat is perpendicular to the fairway and aligned with the slip, put the wheel hard over in a **counterclockwise** rotation. At these slow speeds, the rudder has essentially no effect on the direction the boat is traveling but the propeller will make the stern move to port. The wind

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will be pushing helping to keep the boat aligned with the slip. If it is necessary to move the stern to starboard, very quickly move the throttle control to forward in a quick burst and immediately move it back to reverse. With the wheel positioned hard over **counterclockwise** this short, powerful burst of water will kick the stern of the boat to starboard. The trick is to not hold the throttle in forward so long that the boat begins to move forward but long enough to give the rudder a good kick to starboard.

- c. Once the stern is inside the outer pilings continue to back slowly (with the wheel still hard over **counterclockwise**) with occasional forward throttle burst to kick the stern to starboard.
- d. The crew should walk forward as the boat backs in, staying at the outer piling and attaching the dock line. When the boat is fully in the slip they should cleat the dock line taut when the helmsperson tells them to.
- e. A forward and an aft spring line should be deployed along with the stern dock lines.

### 6. The wind is blowing into your slip away from the fairway

- a. This is the most difficult situation as the wind will be resisting your getting the bow around enough to align the boat with the slip. If the wind is over 10 knots it is probably better to pull into the slip bow first and adjust the position of the boat in the slip to accommodate getting off and on.
- b. If you do need to back in the crew should understand how to use a dock line to spring the boat into the slip if it gets pinned against the outer piling (see item 7 below).
- c. Proceed down the fairway at slow speed (less than one knot) favoring the side your slip is on.
- d. When the bow just reaches the slip turn hard away from the slip and put the engine in reverse.
- e. Once the boat is perpendicular to the fairway and aligned with the slip, put the wheel hard over in a **counterclockwise** rotation. At these slow speeds, the rudder has essentially no effect on the direction the boat is traveling but the propeller will make the stern move to port. The wind will be pushing helping to keep the boat aligned with the slip. If it is necessary to move the stern to starboard, very quickly move the throttle control to forward in a quick burst and immediately move it back to reverse. With the wheel positioned hard over **counterclockwise** this short, powerful burst of water will kick the stern of the boat to starboard. The trick is to not hold the throttle in forward so long that the boat begins to move forward but long enough to give the rudder a good kick to starboard.
- f. Once the stern is inside the outer pilings continue to back slowly (with the wheel still hard over **counterclockwise**) with occasional forward throttle burst to kick the stern to starboard.
- g. The crew should walk forward as the boat backs in, staying at the outer piling and attaching the dock line. When the boat is fully in the slip they should cleat the dock line taut when the helmsperson tells them to.
- h. A forward and an aft spring line should be deployed along with the stern dock lines.

#### 7. If the boat gets pinned against the outer piling

- a. The crew should put a spring line on the aft piling and take it to the spring cleat on the side away from the slip and another dock line on the forward Piling and take it to the chock at the stern and then to the aft cleat.
- b. Move the boat forward (adjusting the two lines as needed) until the stern clears the aft piling by about three feet.

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- c. Cleat the line on the stern cleat tight and put the throttle in slow reverse. The stern should begin to turn into the slip. The crew handling the stern line should slack it a bit allowing the boat to move back then snub tight to make the reverse thrust pull the stern toward the piling. At the same time the crew handling the spring line should keep it tight and even try to pull the boat toward the piling, always keeping the line as tight as possible.
- d. If the stern is close to the aft piling and cannot be turned any more put the engine in slow forward with the spring line cleated and the bow should be pulled toward the wind.
- e. As soon as the stern can clear the aft piling tighten the stern line and put the throttle in reverse.
- f. Slack the stern line about a foot then cleat it all the while keeping the engine in reverse. Repeat this slack/cleat sequence to turn the stern into the slip tightening the spring line when possible.
- g. Once the stern is inside the outer pilings continue to back slowly (with the wheel hard over **counterclockwise**) with occasional forward throttle burst to kick the stern to starboard. The wind will be pushing the boat into the slip so very little reverse throttle will be needed.
- h. The crew should walk forward as the boat backs in, staying at the outer piling and attaching the dock line. When the boat is fully in the slip they should cleat the dock line taut when the helmsperson tells them to.
- i. A forward and an aft spring line should be deployed along with the stern dock lines.

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