Powerboat Maneuvers

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http://www.uspowerboating.com/videos/index.html

Basics

Forward gear: Pushes the bow in the same direction that the wheel is turned.
Reverse gear: Pulls the stern in the same direction that the wheel is turned.

Minimum control speed

Minimum control speed is the slowest speed at which you can operate and still maintain steering control. Typically, this is less than the speed produced when the engine is in gear and the throttle is set at idle rpm, and is accomplished by the use of intermittent power. With the throttle at idle rpm, shift from neutral to forward and back to neutral. This produces a short, gentle pulse of power to maintain steering control. Repeat this technique to keep the boat under control and moving slowly.

Leaving a Dock

Backing away from a dock usually offers the best maneuvering control. It also avoids a problem inherent to forward departures when the boat starts to turn and its stern swings into the dock, preventing the boat from departing cleanly.

- Start by turning the wheel away from the dock, which rotates the propeller away from the dock.
- Shift into reverse, the stern swings away from the dock as the boat backs away.
- To avoid scraping the bow against the dock, make your turning angle slight.
- When clear of the dock and still in reverse, turn the wheel in the opposite direction to bring the boat parallel to the dock.
- Center the wheel, pause briefly in neutral while counting 1-2-3, then shift to forward.

Docking

To master this important maneuver you need to be aware of how your powerboat steers and reacts to changes in throttle and gearshift in different wind and current conditions. Place fenders at dock level and prepare dock lines before making the final approach. Be sure everyone knows what to do with the dock lines.

- Come alongside the dock with the bow pointing into the wind or current, whichever is stronger.
- Approach the dock slowly at a 25 to 45 degree angle and use intermittent power to maintain minimum controllable speed.
- When the bow is 1/2 to one boat length from the dock, make a smooth turn to bring the boat almost parallel to the dock by turning the wheel and briefly shifting into forward.
- Then shift to neutral.
- Turn the wheel toward the dock and briefly shift to reverse to bring the stern in as the boat stops.

Pivot Turn

Use a pivot turn to turn your boat in a confined area.

- Starting at rest, turn the wheel hard over and shift into gear at idle rpm to initiate the pivot turn.
- Shift into neutral and turn the wheel hard over in the opposite direction, while counting 1-2-3.
- Shift into reverse at idle rpm to continue the turn
- Repeat the steps until the boat has completed the turn.

High Speed Stop

To avoid a possible collision with a submerged object or another boat it maybe necessary to stop your boat quickly. To be able to respond promptly, keep one hand on the throttle and the other on the steering wheel at all times. All occupants should be in their seats and have a secure grip on the boat. As a boat rolls in a tight turn, it always slides sideways. There is a risk in some boats of the boat's wake coming over the transom. To avoid this flooding problem, reduce throttle to idle rpm. Make a 90-degree turn. Shift into neutral.

Holding Position

The key to holding position is to anticipate boat drift and make small, gentle corrections early rather than large powerful corrections late. There are two methods for holding position: Bow into Waves, and Stern into Waves. Since the bow will usually have a tendency to turn away from the wind, you will have to compensate for this by periodically shifting into forward gear and making slight steering corrections to bring the bow back into the wind. Because the bow wants to turn downwind, it is usually easier to hold position with the stern into the wind, provided the waves don't come over the transom.

Person In the Water

If a person falls overboard, immediately swing the stern and propeller away from the person in the water. Shout "Crew Overboard!" and throw buoyant objects such as cushions and life rings toward the person. Assign a spotter. Designate someone to point to the person.

- Maneuver the boat into a position downwind.
- Approach slowly using intermittent power, bow first pointing into the wind and waves with the person in the water on the driver's side.
- Shift into neutral and coast to the person.
- When contact is made, shut off the engine.
- Attach the person to the boat using a looped line. Assist the person to get back into the boat.

Anchoring

- After checking an area, approach the anchoring spot slowly heading into the wind or current, whichever is stronger.
- Attach the end of the rode to the boat before releasing the anchor.
- Stop the boat and lower the anchor over bow - do not throw it.
- Let out the anchor line as the boat drifts downwind.
- If the wind has too little effect, back the boat very slowly while letting the line run out freely. Avoid backing too fast, which could cause the anchor to bounce along the bottom.
- When a scope of 5:1 has been let out, wrap the line around the bow cleat and reverse slowly against it until it becomes taut. Use appropriate scope for the conditions.

Towing Alongside

- Towing another boat alongside is often used when bringing a disabled boat into a dock.
- Position the towboat so that its propeller is far enough aft of the other boat's stern to turn the tow in either direction. If towboat is not far enough aft of the other boat, it may only be able to turn in that direction.
- Rig fenders between the boats to prevent damage.
- Tie the boats together tightly using bow, stern and spring lines, so there is no movement between them. If a line is slack, it will reduce the maneuverability of the tow.

Rescuing A Capsized Sailboat

- Approach the sailboat perpendicular to the mast on the forestay side to keep the powerboat away from the sailor on the cockpit side of the boat, or from running over the submerged mainsail.
- Make contact with the top of the mast, or forestay, if the mast is submerged too much to grab.
- Once contact is made with the sailboat, turn off the engine.
- Then lift the mast tip and move hand over hand down the mast and shroud to bring the boat upright.
- Position the sailor so as to be scooped into the cockpit as the boat comes upright.