

2/15/2020

Have you ever watched the boats in a marina, they back and forth, in and out o slips, alongside the dock and then away again. However, every now and then you see something worth watching, no I'm not talking about the ever present new boater who smacks the dock or other boats, but that guy who seems to know exactly how to handle his boat.

He comes up to and leaves the dock perfectly every time, then you see him move his boat sideways without the use of bow thruster or a boat equipped with pods. This is a neat trick and comes in very handy in tight situations, it took years to learn how to do it and I had occasion to practice it just last week, below you will find the technical explanation and the video this month is a demonstration of the easy way to do it.

*To properly know how to handle a forward or reverse moving twin screw boat without using helm-wheel steering, via alternating engines' rpm and shift positions only, it simply takes experience/practice.*

*In difference to single screw (although with a single screw bow and stern thrusters play well at very slow speeds - i.e. docking, near standstill) twin screw can be maneuvered quite well in forward or reverse via engines alone at nearly any speed... without using helm-wheel steering... as long as rudders are maintained in straight position during the forward or reverse travel. Rudders, as well as per engine alternate rpm and shift positions do come into play on twins when moving boat directly sideways from a standstill, while not trying to simultaneously attempt forward or reverse travel – see #3.*

- 1. At higher speeds the rpm allowed per each engine can alter course as needed as well as maintain the course needed... even for long periods of forward travel if necessary.*
- 2. At very low rpm (docking, slow canal travel and the like) carefully actuated per engine shift positions in coordination with their rpm can keep boat placed where desired or maneuvered into positions desired.*
- 3. For making a standstill twin screw boat to move directly sideways to starboard or port (without thrusters)... the following works well:*

### ***"Directly-Sideways" Movement/Handling of Twin Screw Boat***

*Move boat sideways to port (opposite items for starboard)*

- Turn rudders 80% +/- to starboard*
- Place starboard in forward and port in reverse*
- Starboard kept at idle rpm / Port approx 150 rpm higher*

*Once rudders in position with engines in the correct gear at idle rpm quickly adjust direction desired engine rpm - higher equivalent rpm for both engines with same %age difference = faster sideways motion – to a point – it can get hairy, go slow! Correction can become a bitch if boat gets moving sideways at too quick a speed... especially in close quarters! Also, depending on rudder size and prop size the numbers mentioned may need to be adjusted. However, the general mechanical/physics properties of thrust and water flow remain the same for described sideways travel.*

*Take it slow: Gently move a boat laterally. Be careful to not get boat moving too quickly as stopping sideways motion takes considerably more rpm, shift, and steerage adjustment time than simply forward or reverse or circular rotation motion adjustments. Adjust rudder and shift/throttle controls as needed for current and wind conditions to move latterly away from dock. Practice makes perfect. I recommend practice in a completely open area... at least at first!*