

STEERING

By Richard Sorokin

Having a water craft is no advantage unless you can control it and steer it.

The first water crafts were leather tubs or dug out logs. Paddles were used to control them. Today we still use paddles in canoes to propel them and steer them. On light weight vessels they still are effective. As the vessels got bigger hand held paddles were no longer used. The paddle was lengthened and attached to the aft side of the vessel. Since most people are right handed the steering oar was attached to the right side of the vessel. This lead to the right side being the steering board side and called starboard... To protect the steering oar at port, the vessels usually tied up to the docks with the opposite side of the steering oar. Thus the left side of the vessel became the port side.

The side steering oar became too difficult to handle as the vessels grew in size... The blade was moved to the very rear of the ship, attached by hinges, and called a rudder and tiller. It was mechanically controlled at first by hand then pulleys and rope, pulleys and cable then motors as the boats grew bigger. The blade now called a rudder and was used for hundreds of years. From the earliest sailing ships to the modern ships still sailing our seas today the rudder steers them all or most.

Outboard motors are an exception. They have no rudder; they steer by changing the direction of the propeller thrust. The same is true for personal water crafts. Sail boats have two kinds of rudders. The first is attached to the rear of the keel; the second is called a spade rudder and sits at the rear of the vessel on its own axis. These rudders are controlled by a tiller (a control arm) or a steering wheel using pulleys.

Large ships have large engines that drive a shaft to turn the propellers. More recently the huge engines were used to create electricity and the shafts were turned by electric motors. This gave the skipper a lot more control. Now the electric motors are encased in a water proof pod and are suspended from the stern of the ship on movable shafts. The skipper now has complete drive and direction control of his main source of propulsion. There is no rudder. They work now like an outboard.

They have also added bow and stern thrusters (propellers). Today huge ships can turn on a dime, go side ways and maneuver at will. The old tug boat is now out of work.

For hundreds of years we had the rudder and now it is almost gone .Also gone is the steering wheel that used to control the rudder. The biggest ships are now steered with a computer joy stick/

The rudder and the steering wheel are gone on the big ships, what's next?