

HELM ORDERS CREATED NAVIGATIONAL CHAOS

Sometimes language struggles to catch up with technology. So it was with steering or helm orders for over 300 years. Vessels were steered by steering oars, and later tillers (horizontal extensions from the rudder head) for centuries. In smaller yachts and dinghies tillers are still often used for steering.

With a tiller steering system, to move the vessel to starboard, the tiller must be put over to port. To move the vessel to port, the tiller must be moved over to starboard. Since tillers were used for so long for steering, navigators on ships gave helm orders to steersmen in terms of tiller movements. This continued long after ships' steering mechanisms advanced beyond tillers. Increased tonnage and size made the use of steering wheels more practical. A steering wheel is usually connected to the rudder by cables and pulleys in such a fashion that the wheel, the rudder and the vessel all turn in the same direction. Therefore, the use of steering wheels led to confusion. Steersmen had to remember the contrary order, "Port your helm" meant move the vessel to starboard.

An example of these seemingly contradictory orders was seen in the movie *Titanic*. When the lookout spotted the iceberg off the vessel's starboard side, the navigator gave the order "Starboard your helm!" One then watched the steersman turn the wheel to port, the correct direction to minimize contact with the iceberg off the starboard side. The steersman was following traditional helm orders

used for centuries. He knew that the order "starboard" meant a turn to port. Knowing these orders by heart was every steersman's duty.

However, these contradictory orders sometimes created confusion. After World War I, 1914-1918, some nations started giving helm orders in the direction they wanted the ship to turn. Thus, for some the order "starboard 20" now meant to turn the vessel to starboard 20 degrees. As a result, even more confusion was created as different nations used helm orders to mean different things.

The muddle was so great, that participants in a 1928 international conference on shipping in London agreed to use the terms "left" and "right" when giving commands to a person at the wheel, rather than the traditional "port" and "starboard." Then, in 1929, the International Convention for Safety at Sea recommended, in Article 41, that after June 30, 193 all orders to steersmen be given in the direct sense. In other words, an order to starboard meant that the vessel's wheel, rudder and bow, should all turn to the right or starboard.

Confusion lingered on, however, and sometimes resulted in disaster. In the early 1930's, the ships *Mohawk* and *Talisman* collided off the East Coast of the U.S. The *Mohawk* was set up for direct steering orders for its main steering system. The wheelhouse even had a sign posted: "This ship uses direct steering orders by order of the government." However, its backup emergency steering apparatus was marked for

the older helm orders.

On board the *Mohawk*, the main steering system jammed. A starboard turn was needed to avoid collision with the *Talisman*. The navigator gave the order, "10 degrees starboard helm." However, since the backup steering was under the older system, a 10-degree turn to port resulted. Upon seeing that the turn put the vessel on a collision course, the steersman turned the emergency steering system all the way to starboard helm, turning the vessel even further to port. The result was a disastrous collision.

After a congressional inquiry into this collision, the U.S. adopted direct steering rules in 1935. Over 300 years of confusion then ended. Finally, the "new" steering wheel was integrated with steering orders!

Thanks to Richard Hiscock of ERE Associates, 24 Briar Springs Rd., Orleans, MA 02653 for providing some of the information for this article.

