

by **John H.Vargo, Publisher**

Steadying ladder while Hudson River Pilot climbs rope ladder while ship is still underway.



HOW TO HANDLE BILLIONS OF DOLLARS OF COMMERCIAL CARGO ANNUALLY, QUIETLY AND PROFESSIONALLY

The quiet, professional maritime union known as the Hudson River Pilots Association is arguably the most professional group of men and women on the Hudson River!

24 hours a day, seven days a week, 365 days a year the pilots greet every foreign ship that enters the Hudson River.

As important to the success of the pilots doing their job on board the foreign flag vessels as the pilots themselves are the two pilot boats that bring the pilots out to the ships that are entering the Hudson River.

The *Trenton* that is berthed in Yonkers, NY, handled by Captain Edwin Zabonik and the alternate Captain Joe Potaovich and the *Sen. John E. Flynn* which is based at Norrie Point, NY half way up the Hudson River and handled by Captain Joe Thomas. There is a tremendous amount of dedication on the part of those that operate the pilot boats and those that keep them operating. They work enthusiastically and often they work in less than ideal conditions. There is considerable expense, maintenance and shipyard time involved in keeping these old boats in operational condition. the *Trenton* was built

in 1983 and the *Flynn* in 1971. The launch operators and maintenance personnel treat take good care of the boats.

The pilot boats change out the captains as they travel up river at these two key locations.

Captain Thomas works closely with the Hudson River Pilots' Association as operator of the pilot boat located at Norrie State Park. This pilot launch, the *Sen. John E. Flynn*, is responsible for changing out ship pilots coming upriver from Yonkers or down river from one of the marine terminals.

This pilot change is done as a safety precaution to ensure that a well rested pilot is in charge of the navigation of the vessel. The Norrie Point pilot boat also serves Hyde Park Anchorage, where ocean-going vessels regularly anchor awaiting favorable conditions and dock availability upriver. Hyde Park

Hudson River Pilots

Pilot boat *Trenton* passing Yonkers.

is the only Federal anchorage in the 109 nautical mile voyage between Yonkers and the Port of Albany.

The Hudson River Pilots' Association is a small group of mariners responsible for safe passage of all commercial ships transiting the Hudson River. They board northbound vessels at the Yonkers pilot station via the Yonkers pilot boat, Trenton. The Hudson River pilot climbs up the side of the ship while it is underway, walks up to the bridge of the ship and relieves the Sandy Hook Pilot that boarded at Ambrose pilot station prior to entering New York Harbor.

Ships come up the river at all hours, day and night, all throughout the year. These vessels travel to the Hudson River from ports around the world. They come to the ports along the river to load and discharge all sorts of cargoes. Grain, road salt, scrap iron, cement, wood pulp, asphalt, generators and steam turbines are some of the more common cargoes carried by these ocean-going ships.

Each of these ships has a full crew and a captain, the vast majority of these crews are foreign and the vast majority of them have never been to the Hudson River. In New York State, pilotage is required, the ship's captain must give full navigational control of his vessel to the

Hudson River Pilot, an individual that he has most likely never met. This pilot will take the ship up to Hyde Park where the pilot will either be relieved by a fellow Hudson River Pilot who will continue upriver to a dock or the vessel will anchor at Hyde Park Anchorage to await tide or berth availability. The tug & barges we see transiting the Hudson River are U.S. flagged and don't normally require a pilot.

To communicate with other traffic and to give position reports the pilot uses VHF channel 13. Other pilots and captains on tugboats hear these "security calls" and make arrangements for a safe location to meet or overtake. This is important because there are many areas throughout the river where large vessels avoid meeting. In the upper end of the Hudson River, above Kingston, the navigation channel is only 400' wide. While recreational vessels do not need to be within the confines of the channel, ships and tugboats must remain in this channel or they will go aground. Two 600'+ long ships that are each 106' wide meeting in the 400' channel create tremendous hydrodynamic forces.

These forces between the two vessels and between each vessel and the sides of the navigation channel have an enormous effect on the handling of the vessels.

A situation like this requires special ship-handling skills that Hudson River pilots must master prior to becoming licensed pilots.

Before boarding the ship the pilot reviews the tide and current predictions because much of the work is tide dependent. The pilot will also check the weather predictions and the Local Notice to Mariners in order to be prepared for the transit. There are any number of pitfalls that could potentially complicate the transit. Fog is especially dangerous on the Hudson River. If the visibility is lost due to fog or blinding snow the pilots anchor once they can get the vessel to a suitable area. If the portion of the river they happen to be in is too narrow to anchor or contains buried cables or pipelines they must continue on until they reach a safe anchoring location. The radar is quite important in this situation. Once conditions improve the heave anchor and continue.

In different areas of the river the currents have different effects on vessels. When the currents are strong such as during the spring run-off and during the full or new moon the forces on the vessel are greatly magnified. This is further complicated by the fact that each ship has its own "personality" and each ship acts differently in the way it handles. The configuration of the propeller and rudder, the hull form, draft and several other factors contribute to how a ship handles. Some ships are better maintained than others but regardless the Hudson River Pilot must be "on his toes" at all times. Turning a large ship around at the port of Albany in spring freshet conditions when the snow melt and spring rains from the entire northern Hudson River watershed are flowing through the narrow reaches of the Hudson River at Albany highlight the ship-handling ability of the pilots.

A significant comment that Captain Joe Thomas made to me during this interview was the fact that the Coast Guard removes the regular navigation buoys from the shipping channel in autumn and replaces them with "ice buoys." The ice buoys are used because they are designed to survive the tremendous pressure and pounding that the Hudson River ice has on them. They are shaped in such a manner from years of Coast Guard experience to survive all winter. The ice buoys do not all have navigation lights on them, nor do they have a good return on the ship's radar. In heavy ice they may be trapped beneath the ice or dragged off station.

Because of the ice, navigation on the Hudson River changes dramatically. For instance, shipping north of Kingston at night is generally not done during the winter months. The colder it gets, the more ice forms, yet the demand for heating oil increases exponentially. When the river is covered in ice it is common for vessels to get stuck in the ice.

The daily U.S. Coast Guard ice report and close communication with the dedicated crews of the Coast



Hudson River Pilot almost to the top of rope ladder.

Guard ice breakers are invaluable during the winter months. When the ice is extremely heavy, commercial vessels often travel in a convoy up from Kingston and down from Albany. Normally the vessels will wait at Kinston until daybreak to start up together in the morning. Pilots can be on these vessels for days at a time during the winter. Many of the captains and crews of these ships have never seen ice covered waterways and are unfamiliar with ice navigation and ship-handling in ice. Meeting other vessels in heavy ice is a unique skill that the Hudson River Pilots must learn during their training. When two vessels are meeting in the ice, the weight of the ice surrounding the two vessels pushes them together. The pilots must carefully plan this maneuver with the opposing vessel since timing and location of the maneuver are key.

The pilots also stressed that all vessels at anchor are manned and that this is an expensive proposition, these vessels have cargo that must be transported to its destination. Vessels only anchor if necessary.

Another point worth mentioning is that vessels need anchorages so that they have a place to anchor that is free from underwater obstructions. An increasing number of river crossings by pipelines and electrical lines are at danger of being damaged if a vessel drops an anchor (that can weigh over 15,000 lbs) on one. There are more cables coming, most notably the Champlain Hudson Power Express project. This cable is unique because rather than just crossing the river for a short distance plans are for it to run north to south from just below Catskill to the Harlem River entrance, exiting only to avoid Haverstraw Bay.

The Hudson River Pilots Association is doing an outstanding job of moving cargo north and south on the Hudson River. They need the support of everyone to continue to do their work.



Cargo hold full of Chilean red rock salt.