Many people who watch a large oceangoing (typically foreign) ship moving in one of this nation’s ports or waterways have no idea that a local citizen is on the bridge of that ship assisting its navigation. That person is a ship pilot, an individual occupying one of the most important but least-known positions in the maritime industry. Pilots are highly trained experts in ship navigation in confined waters and possess extensive knowledge of local conditions. Their role is to protect the people, economy, and environment of their area by guiding ships safely and expeditiously through the waters of their regions.

This is a difficult, demanding, and dangerous job with heavy responsibilities. It is, however, rewarding and highly respected. Pilots are considered the elite of the mariner profession.

What Is a Ship Pilot?
There are many uses of the term “pilot,” even within the maritime industry. The type addressed in this article is the traditional and most common use of the term—an individual who is not a member of a vessel’s crew, but one who comes aboard to help navigate the vessel in or out of port.

The pilot typically boards an inbound vessel by transferring from a pilot boat at a designated point at sea and climbing a ladder rigged over the side of the vessel. On an outbound vessel, the pilot will board at the dock and then disembark at the designated point at sea via the ladder to a waiting pilot boat below. In some places today, pilots may use a helicopter for boarding and disembarking. Whether by pilot boat or by helicopter, the pilot transfer can be a dangerous operation, particularly in severe weather conditions.

When the pilot arrives on the bridge of a vessel, he or she conducts a conference with the ship’s master, exchanging information about the ship and the upcoming voyage through the pilotage area. The pilot then directs the navigation of the vessel, typically giving helm and engine commands directly to the bridge crew, subject to the master’s overall command of the vessel and ultimate responsibility for its safety. The pilot is independent of the vessel and its owner but must work with the people on the vessel to ensure a safe voyage. In this regard, pilots must balance their public responsibilities with the need to provide good service to the vessels.

Pilots often serve on vessels they have never or rarely encountered before and must work closely with foreign crews with cultural differences and limited English language skills. Despite those challenges, pilots must quickly establish a smooth, cooperative working relationship with the people they encounter on the bridge and must project a calm, reassuring command presence. This is considered part of the “art” of piloting.

Life as a Pilot
Pilotage is a service performed by a licensed professional. Pilots are independent contractors, but belong to an association with other pilots in the port or pilotage region. The typical association maintains and operates one or more offices and pilot stations, pilot boats, dispatch systems, electronic equipment, administrative
services, and other features of a modern pilotage operation. Pilots earn fees paid by the vessels that use them according to published tariff rates. The fees are billed and collected by the association, which then pays the joint expenses of the pilotage operation and divides the remainder among the pilots.

Each pilot works in a rotation administered by the association. The rotation is designed to ensure that the work is divided equally, so that each pilot gets adequate rest and experience in all types of piloting assignments. A pilot can be dispatched to a job at any time of night or day, and pilot associations are required to make a pilot available to every vessel that requires a pilot without delay or discrimination. This means that pilots work irregular hours, often at night and on weekends and holidays.

After receiving notice of an assignment from the dispatch service, pilots make their way to vessels, carry out a piloting assignment, and then, depending on the rotation and work rules, either take a return assignment or go home or to a pilot station to rest and await the next assignment.

Professional Prerequisites
The pilotage of international trade vessels, both foreign-flag and U.S.-flag, is regulated by the coastal states, each of which maintains a pilotage system suited to the needs and circumstances of its own waters. Pilots who operate under such a system are known as state pilots. Pilots of international trade ships in the Great Lakes are regulated by the Coast Guard, because sharing the system with Canada precludes individual state regulation. The Great Lakes pilotage system is modeled after the state system, featuring a “registration” issued to a pilot by the Coast Guard as the rough equivalent of a state pilot license.

Each state pilot holds two pilot licenses—one issued by the state, and one issued by the federal government (Coast Guard). For state pilots, the federal license acts as the national minimum standard. In many states, it is a requirement for admission to a state training program. In other states, particularly those with longer training programs, the individual earns a federal license as one step in the state training program.

How to Become a Pilot
Each state maintains its own process for soliciting and accepting applications for new pilot positions and selecting among the applicants. In addition, each state limits the number of pilot positions so that all pilots get sufficient experience, and the pilot association can be assured of the revenues needed to maintain a modern public service pilotage operation.

A state pilot license requires considerably more experience and training over and above the federal license. Pilot trainees under both the state and Great Lakes systems learn in a traditional apprenticeship-type format with hands-on training under the direction of senior pilots. A trainee may make hundreds or, in some cases, thousands of instructional trips before being allowed to pilot “solo.”

At some point in most programs, the trainee will receive a deputy pilot license, allowing the individual to pilot vessels of limited size or type. The deputy will continue to make instructional trips with senior pilots on vessels outside of the limits of the deputy license while gradually upgrading the deputy license for work on larger and different types of vessels.
The length and content of the training program varies from state to state and, in some places, from pilotage area to pilotage area within a state. This is generally a function of the prior experience, background, and qualifications required for admission to the program. Variations in those requirements, in turn, are a function of the particular needs and demands of pilotage in an area.

Some states require prior experience as an officer—or even as a master—on oceangoing vessels. Some states require service on a towing vessel or allow that as an option. Some states will accept individuals without any prior mariner experience. As can be expected, those states that accept individuals with little or no prior vessel service experience have longer training programs. The time it takes to complete a state training program and become a full pilot may range from one to two years, if the candidate meets that area’s considerable prior vessel experience requirements. In places that train pilots “from the ground up,” this process may take up to nine years.

The traditional hands-on training of new pilots is supplemented by modern classroom and simulation instruction. In addition, state pilots and Great Lakes pilots must also meet rigorous continuing training and professional development requirements throughout their careers. Training, both initial and continuing, features courses in bridge resource management (approved by the American Pilots’ Association), electronic navigation, emergency shiphandling, legal aspects of pilotage, and a number of other subjects. Simulation training is offered on manned models, full mission or partial bridge simulators, and personal computers.

A Look to the Future

The piloting profession is committed to staying in the forefront of advanced navigation technology. Pilots are trained in the latest types of navigation equipment and have first-hand experience using advanced technology and incorporating it into their piloting practices. Some of the most innovative uses of modern electronic navigation today are being handled by pilots. Pilots, therefore, are expected to remain current in the latest navigation technology and practices.

The operations of state pilots, as well as their training and piloting activities, are regulated closely by the applicable state pilotage authority for the specific pilotage region. In all coastal states but one, this authority is a pilot commission, which is a governmental entity established under the state pilotage statute.
Most pilot commissions have a mixed membership, composed of representatives of ship operators, port interests, environmental groups, pilots, government agencies, and the public. The commission selects individuals for admission to a training program, oversees the training program, issues licenses, investigates accidents involving pilots or complaints filed against pilots, and oversees the various aspects of the pilotage operation.

State pilots are also subject to considerable regulation and oversight by the Coast Guard, primarily through the standards for maintaining the federal pilot license and federal and international navigation regulations. In addition, pilots work closely with the local Coast Guard commands to best achieve their respective responsibilities for navigation safety and to assist the Coast Guard in its security missions.

About the author:
Mr. Paul Kirchner is the executive director and general counsel of the American Pilots’ Association in Washington, D.C. He has been an attorney in Washington, specializing in maritime law, since graduating from the University of Virginia School of Law. He was in private practice from 1978 to 1992, when he moved to his present position in-house with the American Pilots’ Association. He is a frequent speaker and writer on various aspects of the piloting profession.