

# CAREERS



# Not Just Another Day at the Office

*Careers in the tugboat, towboat, and barge industry.*

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Picture yourself on a towboat, transporting barges full of grain toward New Orleans. As you pass under a bridge, the children fishing on the shore wave to you. Now picture yourself on a tugboat that is approaching a huge aircraft carrier. You look up to see the sailors standing at attention on deck. They are trying not to smile, but it is obvious they are happy to be home. Your boat helps to push the carrier into her berth in the harbor, bringing the sailors home to their families.

Perhaps you can see yourself in the galley (kitchen) of a tugboat, slinging hash and poaching eggs for the hungry crew while passing under the Brooklyn Bridge in New York City, admiring the beauty of Mt. Rainier in Washington, or floating down the Mississippi River. These are all examples of the desk job alternatives enjoyed by crewmembers in the maritime industry.

The tugboat, towboat, and barge industry is one of the most diverse in today's transportation environment. Consisting of approximately 4,000 towing vessels and 27,000 barges, the fleet plies American waterways from the New York harbor to the port of Los Angeles, from the Mississippi River to the Great Lakes.

This industry allows us to take advantage of some of our greatest natural resources and adds billions of dollars a year to the U.S. economy. Waterway transportation contributes to the American quality of life by moving goods off congested roads and rails and away from crowded population centers.

## **Tugboats and Towboats**

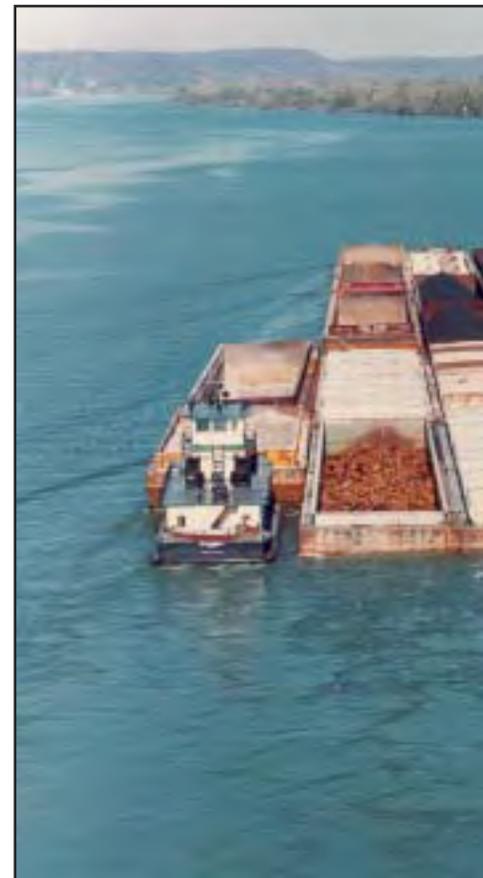
The towing vessel fleet includes tugboats and towboats. Tugboats are used to pull or tow barges on ocean or open

water routes. Ocean towing involves long towlines between the tugboat and tow to provide the necessary slack to accommodate rough water and varied weather conditions.

Harbor tugs are essential in every port to help maneuver large ships through narrow harbors and assist them in docking and undocking from confined spaces. Harbor tugs use short towlines and the physical force of pushing the large ships with their rubber-fendered bows and sterns to guide them.

The articulated tug barge (ATB) was built to increase efficiency and safety in ocean towing by eliminating the long towline. Instead, the tugboat fits into a specifically designed notch in the barge's stern and the two units are tightly connected. This allows for more control in steering the barge. ATBs are often mistaken for tank ships by the casual observer.

A towboat is a powerful boat with a flat front that pushes barges on rivers.



Towboats typically have flat hulls to accommodate the shallower depths of inland waterways. Barging is the most economical mode of cargo transportation, moving bulk commodities like grain, coal, petroleum, and salt for a fraction of the cost of transporting them by truck or rail.



A towboat pushes a barge under the Hellgate Bridge in New York. Photo courtesy of Mr. Don Sutherland.

### Careers in the Tugboat, Towboat, and Barge Industry

There are many positions on towing vessels, and the vessels' smooth operation depends upon the teamwork of the diversified crew. Each position is essential to the task at hand, and advancement is readily available for hard-working, drug-free individuals.

**Deckhand or ordinary seaman.** The entry-level position on a towing vessel is called a "deckhand" on inland towboats, an "ordinary seaman" on coastal tugboats. These crewmembers prepare barges for loading and unloading cargo, build tows, and perform basic vessel maintenance and housekeeping duties. More experienced deckhands may be called "lead deckhands" (or

"mates") in the inland towing industry and have leadership duties as well.

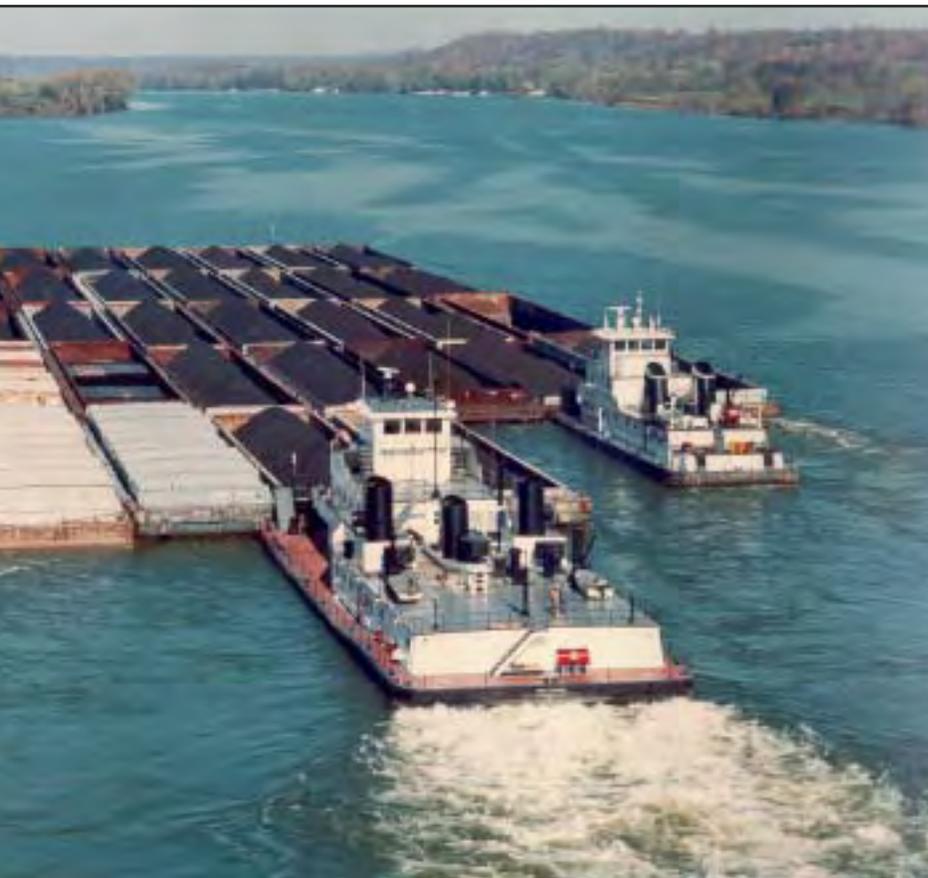
Experienced ordinary seamen on coastal tugboats graduate to "able-bodied seamen." On most towing vessels except those operating on rivers, deckhands re-

quire a Coast Guard-issued Merchant Mariner's Document, or MMD.

**Cook.** The cook buys and prepares food for the crew. Some cooks also work on deck between meal preparations, in which case they may be called cook/deckhands. Cooks on towing vessels (with the exception of those working on rivers) require a Merchant Mariner's Document.

**Tankermen.** These mariners work on towing vessels that move liquid cargo in tank barges, and are specially trained for the environmentally sensitive job of transferring oil or chemical cargoes between barges and tanks on shore. Tankermen require a Merchant Mariner's Document with a tankerman endorsement, which entails training and experience in handling liquid cargoes.

A barge just below Twelve Mile Island on the Ohio River. Photo courtesy of The American Waterways Operators.



**Engineer.** The engineer is in charge of the operation and maintenance of the boat's engines and machinery and the barge cargo pumps. A deck engineer is an engineer who also performs deckhand duties. Engineers are trained, experienced personnel who may or may not be required to hold a Coast Guard-issued license, depending on the size and location of the vessels on which they work.

**Masters, mates, and pilots.** The crewmember who drives a towing vessel is the "master" (or "captain"), and his or her second-in-command is known as a "mate" on coastal tugboats or a "pilot" on inland towboats. Unlike the independent contractors who typically guide larger vessels in and out of coastal ports, this type of pilot is a crewmember. The master and mate or pilot alternate shifts nav-





Tugboats provide a “ship assist” to a container ship arriving in the Port of Seattle. Photo courtesy of The American Waterways Operators.

igating the vessel. The master is the manager of the vessel, responsible not only for operating the boat safely and efficiently, but for managing the crew as well.

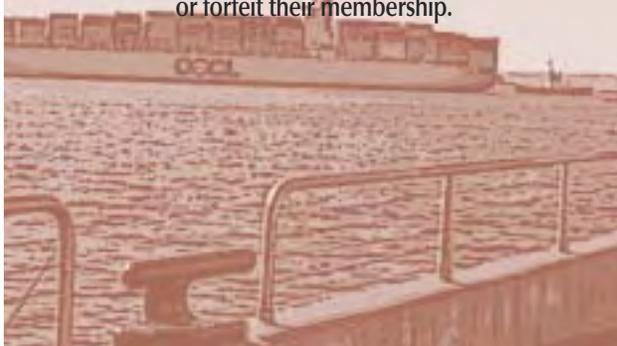
Nearly all towing vessel masters, mates, and pilots started their careers as deckhands and worked their way into the wheelhouse, obtaining the necessary training and Coast Guard licenses along the way.

Obtaining a Coast Guard license as a master of towing vessels is normally a three-step process requiring a written examination, four years of experience, and a practical demonstration of navigation skills. Individuals working their way up to master first obtain an apprentice mate (steersman) license—in effect, a learner’s permit that allows for practice in the wheelhouse under the supervision of an experienced mariner. The next step is mate, and, finally, master.

### Responsible Carrier Program

Barges and towing vessels are subject to strict regulations regarding the discharge of oil and solid waste into the marine environment; members of The American Waterways Operators support vigorous enforcement of these laws and penalties for violators.

Working closely with the Coast Guard, AWO members not only comply with stringent safety and environmental regulations, but have demonstrated their strong commitment to environmental protection by creating the industry’s own code of safety best practices: the Responsible Carrier Program. This Coast Guard-recognized, award-winning program sets a higher standard by which all AWO members must operate, or forfeit their membership.



### FOR MORE INFORMATION:

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### Shoreside Jobs

In addition to careers aboard vessels, tugboat and towboat crews are also supported by staff on land. These positions vary widely by company, but some of the most important include:

- **port captain (usually a former vessel master)**—works with the captains to supervise and manage boat crews;
- **port engineer**—responsible for keeping boats and barges on a regular maintenance schedule;
- **mechanic**—performs inspections and repairs on the vessel, and reports to the port engineer;
- **dispatcher**—assigns boats to barges or ships, and also assigns crews to man the boats;
- **safety manager**—oversees training programs, vessel inspections, and compliance with regulations.

### The Industry

Jobs in the maritime industry provide a secure and stable career path for those who are ready to be a part of the maritime family. These positions present the opportunity to make a good living with family wages and great benefits.

The maritime field enables those who do not have a college degree to engage in a skilled and rewarding profession with an unrivaled chance to learn a unique trade. The industry is an exciting alternative to a 9-to-5 job.

So why be stuck behind a desk in a windowless office when you can enjoy the freedom of sailing down the Mississippi River? Those who become part of a tugboat or towboat team can also take pride in being a part of an industry that is vital to the economic well-being of our country.

### About the author:

Ms. Krista Reddington is a former government affairs associate for The American Waterways Operators. AWO is the national trade association representing the owners and operators of tugboats, towboats, and barges serving the waterborne commerce of the United States.