

The background of the magazine cover is a wide-angle aerial photograph of the Ohio River. In the upper portion, two large steel arch bridges span the river. The lower portion shows the river flowing through an industrial urban area with numerous brick buildings, some with red roofs. A major highway with multiple lanes is visible on the right bank. Several barges are moored along the riverbank. The overall scene is a mix of natural water and man-made infrastructure.

# The Ohio Magazine

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## The Tow Barges of the Ohio River

Behind the scenes of the lives of those who work on the Ohio River



# The Ohio River and its Tow Barges

**Tow barges move nearly 350 million tons of goods along the waterway each year, carrying a bevy of raw materials. Their interstate is a twisting, slender, crowded waterway. And their crews – like the channel itself – are a working lot.**

**PHOTOS & STORY BY MITCH CASEY**

Thirty-four hours and 148 Ohio River miles after he picked up a string of 15 empty barges, tow pilot Steve Pearson is preparing to deposit them and head another mile north for a set already loaded with coal.

But the radio delivers bad news: The coal terminal scheduled to accept the empties is reneging, citing high water and low capacity. A quick conversation with his company and Pearson makes alternate arrangements. To him, it's all in a night's work.

So at 1 a.m., with little illumination other than a pair of spotlights, he begins backing up a tow that's longer than three football fields on a stretch of river that's less than half that wide. Pearson is patient, mostly letting the current carry the tow and staying on course with only an occasional thrust of the engine. The mile-and-a-half trek – through pockets of fog and around a 90-degree bend – takes about an hour.

"What you just witnessed was one hell of a piece of driving," says deckhand Eric King. "Steve is just the absolute best at knowing this river, and how to navigate

it even when backing up in darkness."

Pearson, 63, pilots the M/V Paul Tobin for American Electric Power, meaning he's second in command aboard the tow that, since its commission last summer in New Orleans, has traveled the Ohio River for 24 hours a day, seven days a week. He's worked on a tow since his high school graduation, including 28 years as a captain.

The Ohio River originates in Pittsburgh, Pa., at the confluence of the Allegheny and Monongahela rivers, and empties into the Mississippi at Cairo, Ill., 981 miles downstream. By volume, it is the largest of the Mississippi River's tributaries.

Hydrologically, that means that it's the Ohio that drives the current in the Mississippi at that point, and a few historians – including Bill Reynolds of the Ohio River Museum in Marietta, Ohio – believe that the river flowing into the Gulf of Mexico some 575 miles from Cairo could be aptly renamed "the Ohio."

"One could make the argument that it's the Mississippi that runs into the Ohio at

Cairo," Reynolds said. "For sheer water volume being carried by a river at that point, the Ohio wins."

What is unanimous in historians eyes, however, is the fact that the Ohio was a vital tool to exploration and expansion westward from the original 13 colonies. Native Americans, European explorers and the American settlers who followed all used the Ohio as a major transportation and trading route. Today, it serves those same purposes, carrying 14 percent of the United States' entire cargo. Its specialty is bulk goods: coal, petroleum products, grain, ores, building materials, scrap, chemicals and more.

According to the Texas Transportation Institute, barges are by far the most efficient, economical and environmentally friendly way to move sizable cargo. They require plenty of fuel – about 3,000 gallons of diesel a day – but on towboats the size of the M/V Paul Tobin, topping off the fuel tanks means taking on 69,000 gallons of diesel fuel when empty. One tow with a typical Ohio River string of 15





barges can transport as much cargo as 225 train cars or 870 semi-trucks. That means it can hold enough grain to bake 2.5 million loaves of bread, or enough gas to keep 2,500 cars on the road for a year.

"It'll always be important simply because it's just such an efficient way to move things," Jeff Spear says of the Ohio River. Spear, who grew up along the river and is a noted historian, is president of Sons and Daughters of Pioneer Rivermen, an organization based in Marietta, Ohio, with members across the country and around the world.

"Most of your electricity in the (Mid-Ohio) Valley comes from coal-driven power plants," he says, noting that the coal that fuels those plants — even the cleaner burning variety from out West — travels at least part of its journey by barge. "Plus,

chemical plants love to be next to the river, because they get a lot of their cooling water from the river directly.

"And when they manufacture things, it's so cheap to move it out by barge," Spear adds. "So a lot of the commodities that are made along the river are then shipped out by river, and it's very efficient." Despite his fondness for the river, Spear cautions against buying into some romantic notion of life along the Ohio.

"It's a working river, and those guys out there really, really work hard. And this time of year especially is the worst. It's the most dangerous," he says during a February interview. "You'll see them walking on the gunnels of barges on the outside of the tow in the summertime. (But) you hardly ever see that this time of year.

You go tumbling in that river in those heavy clothes and even if you've got a life jacket on, which you have to, you freeze

to death from hypothermia pretty quickly. It's a dangerous world."

Pearson, the Tobin's pilot, has worked on or navigated many rivers in his 40-plus years on the water. The Mississippi, the Tennessee, the Missouri, the Cumberland. When he first began his career in the early 1970s, licensing for riverboat pilots was gradually being lessened, due to

technological advances in navigational aids and the cumbersome nature of handing off a vessel to another pilot for the next stretch of river.

In the steamboat era, pilots frequently only had licenses for relatively small stretches of the river. Navigators back then had to show a knowledge and mastery of the location of every sand bar, every bend, every bridge pier location, and the depth of the main channel at any given point along the stretch of river for which he was licensed.

For most river pilots, that generally meant they were limited to working the river in short stretches — from Cincinnati to Louisville, for example.

## You don't want to take any river for granted — ever.

In essence, pilots would become a master for a specific stretch of the river. They would then hand off their cargo to a pilot with mastery of the next

stretch downstream. It was rare that a pilot would have a license for more than just a stretch or two of a river.

Pearson, through schooling and numerous apprenticeships, became licensed for many sections of the Ohio in an era of eased restrictions and technological advances. It was a feat that many pilots in earlier eras never achieved. Pearson's experiences as a crewmember on many western rivers have added to his vast knowledge of America's river system.

While on watch piloting the Tobin, Pearson displayed his hand-drawn maps illustrating the intricate nuances of the Ohio — each bend, each river bank choke point — that enabled him to become a master pilot years ago.

Those maps, now stowed away in a brief case that accompanies him each time he takes command of the pilothouse, serve as a reminder of his mastery of this river.

Today, pilots and captains have the huge advantage of technological advances.

What once was condensed to a hand-written book of notes has been replaced by high-tech radar systems, sonar devices, and Global Positioning Systems.

Today, pilots rely heavily on computer screens that intricately illustrate their exact location, at what depth their vessel is, and of the dangers that lie ahead. Pilots today are still required to be a master a river, but their skills more

importantly mandate that they understand the huge technological innovations in navigation. This evolution has allowed pilots to navigate much greater stretches of America's river system than ever before. Pearson has adapted to the evolution of river piloting, but still believes that experience, intuition, and knowledge with the addition of today's technology makes one a great pilot.

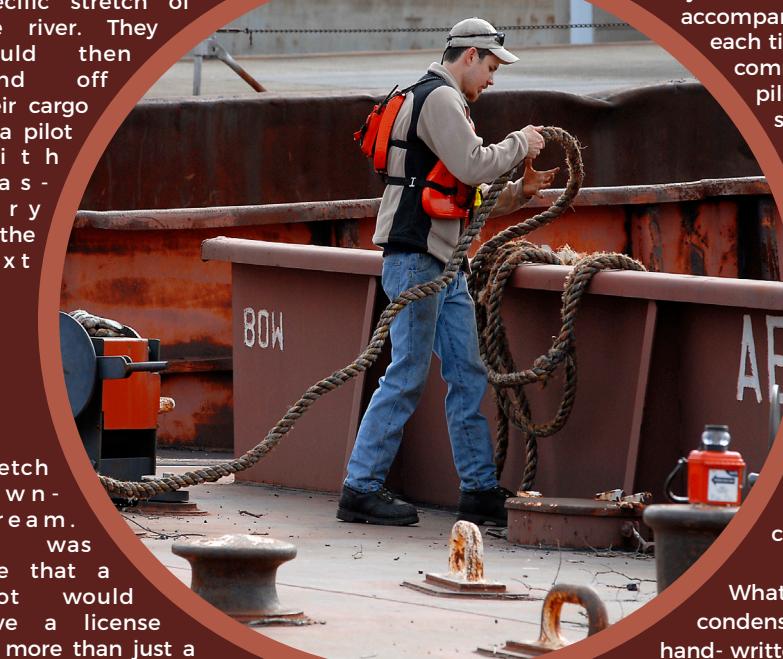
The veteran pilot has worked many rivers, but in his mind, not one American river compares to the Ohio. For its sentimental value, yes. He's spent most of his working life on it, as did his father. But also for its challenges.

"You don't want to take any river for granted — ever. But when the Ohio gets to running, it's about as hard a place to work as any in the country," Pearson says. "It's much narrower than the Mississippi, and has hills and mountains flanking both sides up here."

"Up here," at that point in the conversation, was Powhatan Point, Ohio, about 20 river miles south of Wheeling, W.Va.

"This river is a highway for bulk goods and it's not as easy as it looks getting from Point A to Point B. Narrow, winding, ever-changing weather conditions, a lot of traffic. High water can change the normal channel, and in an instant can throw you into the banks if you're not careful," Pearson says. "Add wind to the mix and, at this time of year when you're pushing empty barges that sit 14 feet off the water, those barges can act like sails. One minute you're in the proper navigational channel, the next, the wind has those empties on a collision course with the bank. So, yeah, it's a challenging river," Pearson adds, almost matter-of-factly.

Mark Clay, captain of the M/V Tobin, agrees. Clay, 50, has been a captain for



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the last six years, but has spent the previous 19 years working his way up the ladder on towboats, working first as a deckhand, then as a mate and finally as a pilot.

"This job is never the same everyday. Tonight, we have a lot of high water. That presents challenges due to a faster running current. Water, wind, weather – you never know what the river's gonna do."

"It can be unforgiving, when you think you've got it whipped, that's when she'll put you into the banks."

Those who work alongside the Ohio earn their keep, too. One example is the crew of Marietta Industrial Enterprises (MIE), a cargo-handling firm at mile marker 175.

According to Vice President of River Operations Burt Elliott, the company moved nearly a million tons of bulk goods in 2011, including coal, coke, manganese, gravel, quartz, steel, limestone, and road salt.

Elliott has been working most of his adult life along the river in some capacity, and he still likes to get his hands dirty.

"I'm a deckhand at heart," he says. "I love to get out and work on these barges, tightening lines and such. Often, I'm working right along side the guys to help pull the next barge into position."

The Ohio River, it seems, gets in one's blood. Pearson exudes much of the same passion.

"Ever since I got on board with my dad at the age of 5, I wanted to be a river pilot. My dad was a pilot, and sitting in his lap in the wheelhouse – looking out over a long tow of barges, hearing the engines whirring, watching my dad's hand gently guiding the boat in the right direction, seeing the river banks slowly sliding by – I got hooked on river life at an early age."

"I like the challenge of piloting – it's not for the money. I flat out just love the river. The twists and bends, the ever changing weather conditions, the beauty of winding through a river valley fronted by hills and small mountains on both sides."

"I've worked on nearly every river in America over my career," Pearson continues. "When I worked on the Mississippi, I'd often catch a flight to St. Louis, New Orleans, wherever, to meet the tow whenever it was at that time. A lot of travel, a lot of idle time in airports, on shuttle vans.

It got old. So I decided to return to piloting after being a captain for the better part of 20 years. That led me back to the Ohio, much closer to home, and a river that I love more than any other in this country."

### Life on a tow

Camaraderie, bounty of food accompany taxing, perilous work

The risks, routine and time away from home aren't for everyone. But some wouldn't consider any other work.

Life aboard the M/V Paul Tobin gives its crew of nine short stints off, plenty of comfort food and membership in a band of brothers. But it also requires a demanding schedule of six hours on watch, six hours off, around the clock. This regimented routine is carried out for three straight weeks before crews get the next 21 days



off. And while on board, there are the dangers inherent in river work.

"This can be a hard life, but a very rewarding one. On board, it's up, eat, push coal, eat, bed. Then do the same thing over six hours later," says Captain Mark Clay, who's been on tows for 25 years. "But there are trade-offs. I'm gone for the better part of the month, but I'm home for the better part of the next one, no strings attached. I'm free to be a grandpa, a husband, a father."

At the other end of the spectrum is Rodney Epling, a deckhand on his first

trip up the Ohio River.

"So far, so good," he reports four days in. "The work seems pretty easy to adapt to. And the crew, aside from some jokes on the new guy, has helped me with any questions."

The Tobin is the newest of American Electric Power's 84-tow fleet that hauls coal on the Ohio and Mississippi rivers. Costing \$17 million to build and commissioned in 2011, it sports a spring-mounted cabin and high-efficiency engines that give the crew a smooth ride compared to towboats of a generation ago.

The cabin area is comprised of sleeping quarters, the galley, eating facilities, leisure areas and the pilothouse. It rides essentially on springs with the new design in river towboats. This innovation keeps the living quarters aboard the Tobin relatively quiet compared to its predecessors and much more stationary.

"This is really the Cadillac of the AEP fleet on the Ohio River. Those springs below us help to smooth things out, especially going up river when the water tends to be choppier," says pilot Steve Pearson. "This boat has it all – single bedrooms for crew complete with satellite TV, private bathrooms and showers. Compared to when I first started out on the river, this is a floating palace."

A community gathering area and a small exercise room complete with weights and cardio equipment round out the appointments aboard the Tobin.

With their six-hour shifts, Mike Rogers, Eric King, Rodney Epling, Steve Pearson, Mark Clay, Gabe Edwards, Tom Ashworth, Jeff Pelfrey, Chris Stone and Jason Robinson have little time to sandwich more than sleep and meals. Luckily the latter are good, and astounding to visitors aboard a tow for the first time.

"Basically, these guys have all the food comforts of home," says cook Chris Stone, who runs a charter fishing business in Punta Gorda, Fla., during his weeks off. "I

like to keep them guessing as to what's for dinner or lunch. That makes my day – when they come to the galley eager to see what's been prepared for them."

One recent dinner included steak, baked potato, salad, rolls, potatoes au gratin, asparagus, pasta salad, fruit and blueberry cheesecake or apple pie. Breakfasts and lunches are equally impressive with an array of traditional favorites – eggs, bacon, home fries, biscuits – accompanied by fresh fruit, yogurt and cereal.

Stone serves meals beginning at 5 a.m., and again six hours later before winding up with dinner at 5 p.m. The crew preparing to begin its watch eats first, then replaces those that are finishing their chores. The departing watch takes its turn in the galley before heading off to bed. And the kitchen is always open for the guys to help (and clean up after) themselves.

"I cook from early in the morning through dinner at 5 p.m., clean up and head to bed. For 21 straight days, this is my routine, and I love it," Stone says. "I love the camaraderie I have with the crew – the joking, the barbs." And he's not alone.

"There seems to be a strong bond between us all," Pearson says. "If you go away for three weeks with nine other guys, you better have a good sense of humor, and I think we've got that here on the Tobin."

While a vessel this size has a normal eight-man crew, the Tobin carries nine on this stint to break in new deckhand

Epling. The 19-year-old will serve his apprenticeship under the watchful eye of a veteran for several more stints to come before being reassigned to a vessel in need of a new deckhand.

Away from the galley, however, the crew knows what's at hand. Four crewmen take the six-hour shifts – the pilot or captain, two

deckhands, and an engineer or oiler to man the engine room. During their shift, crewmembers face a variety of daunting tasks.

They include walking the entire length of the tow to check for leaks and loose cablelines, and dropping or picking up barges at various locations, night or day. The crew must also connect thick steel cables to the barges in their tow, assist in lockages, clean and maintain all aspects of the vessel, and do a variety of housekeeping duties.

But there are moments when a pause from the grind exists.

"It can be very peaceful in those times when you've got a moment at the head of the barge," watchman Tom Ashworth

says. "I love taking in the scenery, the hills and valleys, the wildlife". Six hours later, following a meal and a few brief moments to catch up on the outside world, the crew charged with that watch does it all over again.

Life aboard a towboat is dangerous. The perils of falling into the river, being clipped by tightening cable lines, or coupling barges together in the middle of the night is difficult even for the most experienced rivermen.

"There are just so many hazards out here. You just need to keep your wits about you and think through every situation before you begin the task at hand," deckhand Gabe Edwards says before heading to his cabin for some shut eye. In less than six hours, he'll be up again, ready to begin another watch.