

"Tight-Assed River"

John McPhee

The New Yorker, Nov. 15, 2004

1. The "Pekin wiggles" are halfway up the Illinois River, between the Mississippi River and Chicago. On the radio, other tows tell us how they are doing in the Pekin wiggles. During the forward watch, on this tow, the captain mentioned them when they were still three hours upstream. They would not be his to negotiate. Two in the afternoon and the pilot, Mel Adams, of the back watch, the after watch, is addressing them at the moment. He has made a sharp turn to the left followed by a bend to the right, and is now going into an even sharper turn to the left that will line him up with the Pekin railroad bridge, of the Union Pacific. There is not much horizontal clearance under the Pekin bridge.
2. Mel is tall and lanky, fed in the middle but lithe in the legs. He has a sincere mustache, a trig 1 goatee, and a slow, clear, frank, and friendly Ozark voice. He lives in southern Missouri, on Table Rock Lake, which has seven hundred miles of shoreline. The eight other people in the crew of this vessel all call him "Male." They are from Kentucky, Tennessee, Oklahoma, southern Missouri, and southernmost Illinois. They work twenty-eight days per stint. When they report for work, they show up in Paducah and are driven in a van from Kentucky up into Illinois or anywhere else this towboat happens to be. Its name is Billy Joe Boling.
3. Over all, the Illinois is a fairly straight river, only ten per cent longer than its beeline, the fact notwithstanding that the bends at Pekin corkscrew like fishing line that has come untied. Mel understands monofilament. He is wearing shorts, sandals, a cap with the word "fishing" sewed into it, and a T-shirt covered with fish. Each morning, before he goes off watch at five-thirty, he cell-phones his wife, Aurora, and gently awakens her. When he is at home, he routinely gets up at four-thirty, goes fishing, is off the lake by nine, and by nine-thirty has cleaned his fish and put them in the freezer. He says his personal best is a twenty-eight-pound flathead catfish. In his Bayliner Trophy 1703 with center console, he penetrates the bays and skims the shoals of that seven-hundred-mile shoreline, his touch grooved with experience.
4. A lot of good that will do him here. This vessel is no Bayliner with center console, and the Illinois River is not a big lake in the Ozarks. The mate Carl Dalton has gone up ahead with his walkie-talkie to serve as a pair of eyes for Mel in the pilothouse, near the stern. Carl is a tall guy who played Kentucky high-school basketball, but when he was halfway up the tow, near the break coupling, he was already a tiny figure, and now, all the way up at the head, he is an ant. This vessel is a good deal longer than the Titanic. It is thirteen feet longer than Cunard's Queen Mary 2, the longest ocean liner ever built. It is forty-four feet longer than any existing aircraft carrier. It is a hundred and five feet wide. And with Carl calling off numbers--"twelve wide on the port . . . two hundred below . . . twelve wide, a hundred and fifty below . . . eight wide on the port, a hundred and twenty-five below . . . seven wide on the port . . . six wide on the port"--Mel is driving it into the crossing currents of the hundred-and-fifty-foot gap between one pier and the other of the bridge's channel span. It helps that the railroad tracks have been raised. In their normal position, they are three feet lower than the Billy Joe Boling.
5. The Illinois River is in most places a little more accommodating. With exceptions here and there, the demarcated channel is three hundred feet wide. But you are not going to do a doughnut with this vessel. You are not going to do a Williamson turn. Both maneuvers describe closed three-hundred-and-sixty-degree circuits. This vessel is nearly four times longer than the channel is wide. The entire river in most places is about a thousand feet from bank to bank. Our bow wave quickly spreads to both shores. We could not turn about if we had all of the river to do it in. If we were ninety degrees to the direction of the channel, we would block the river solid and spill over both sides into the trees.
6. Among American rivers, only the Mississippi and the Ohio float more ton-miles of freight than the Illinois, a fact that does not seem to have done much to raise its national profile. People say, "The Illinois

River? What's that? Never heard of it. Where does it go?" Actually, there are three Illinois Rivers in America, each, evidently, as well known as the others. One is in southwestern Oregon. One rises in western Arkansas, describes a vast curve through eastern Oklahoma, and goes back into Arkansas as a tributary of the Arkansas River. The autochthonous Illinois River begins not far from Chicago, at the confluence of the Des Plaines and the Kankakee. From river town to river town, it draws a bar sinister across the state of Illinois--Marseilles, Ottawa, Starved Rock, Hennepin, Lacon, Rome, Peoria, Pekin, Havana, Bath, Browning, Beardstown, Meredosia, Florence, Hardin--descending two hundred and seventy-three river miles to Grafton, Illinois, on the Mississippi River forty miles up from St. Louis.

7. In the thousand feet in front of Mel are fifteen barges wired together in three five-barge strings. Various, the barges contain pig iron, structural iron, steel coils, furnace coke, and fertilizer. Each barge is two hundred feet long. Those with the pig iron seem empty, because the minimum river channel is nine feet deep and the iron is so heavy it can use no more than ten per cent of the volume of a barge. The barges are lashed in seventy-six places in various configurations with hundreds of feet of steel cable an inch thick--scissor wires, jockey wires, fore-and-afts, double-ups, three-part backing breasts, three-part towing breasts. The Billy Joe Boling, at the stern, is no less tightly wired to the barges than the barges are to one another, so that the vessel is an essentially rigid unit with the plan view of a rat-tail file. In the upside-down and inside-out terminology of this trade, the Billy Joe Boling is a towboat. Its bow is blunt and as wide as its beam. It looks like a ship cut in half. Snug up against the rear barge in the center string, it is also wired tight to the rear barges in the port and starboard strings. It pushes the entire enterprise, reaching forward a fifth of a mile, its wake of white water thundering astern.

8. Carl Dalton, on the head of the tow, now says, "Six wide on the port, fifty below."

9. Mel, in the pilothouse, is grinning. He has come up to this railroad bridge many times before and evidently it amuses him. "This place is so narrow you have to put guys out on the head to tell you where you are," he says, and laughs.

10. Where is he? Fifty feet from the bridge, and his head corner on the port side is lined up so that it should miss the nearest pier by six feet. He is steering the Queen Mary up an undersized river and he is luxuriating in six feet of clearance. Meanwhile--back here a fifth of a mile--the dry riverbank is ten feet behind the stern rail. The stern is so close to the bank you could almost jump off without getting your feet wet. Mel is not standing at a wheel. On this vessel, a wheel is a propeller. There is no wheel in the pilothouse. He is handling instead a pair of horizontal sticks--beautiful brass fittings with pearl handles, one for the steering rudder, one for the flanking rudder. He also has two throttles, one for each engine. Each throttle has a forward and a reverse position. If he goes forward on one and back on the other, he can walk the whole tow sideways.

11. Years ago, our captain--who is off duty and in his room sleeping--was a deckhand on a tow that hit this bridge and scattered all fifteen barges.

12. "Five wide," Carl says. Carl is five feet from the pier and has drawn even with it.

13. "That's perfect," Mel tells him. "That's all. I got 'er."

14. "Getting set" is vernacular for being moved sideways by current. When Mel is steering through less complicated reaches of the river, he will choose an object under a mile in front of him (an island, say) and another object (say, a church steeple) directly behind the first one and much farther away. If the steeple moves to the left with respect to the island, the tow is being set to the left. If the steeple moves off to the right of the island, the tow is being set to the right. He doesn't need any church steeples here. There is nothing subtle about the current under this bridge. We are about a third of the way through now and the current has begun to shove the head from the west side of the channel toward the east, skidding the whole big vessel from one pier toward the other. We started sixty inches off the west pier and--after moving forward eleven hundred and forty-five feet--we end up sixty inches off the east pier as the stern slides by it.

15. Mel aims the tow into a mile and a half of dead-straight river. Skyscraping grain elevators line the eastern bank. Beyond them, and behind a high levee, are the invisible streets of Pekin. "When we was

going through the bridge, we had to favor the leg on the left side 'cause the current will push us over to the pier on the right side, so we had to favor the pier on the left side real close," he says. "You could feel the current catching the head, pushing it over towards the right. So we pushed it through about another two hundred feet, then let it run on straight rudder for a while. By the time we got through the bridge, we only had about five feet of clearance on the starboard side. That's how you take it through that bridge, especially when we got some current running, like we do now."

16. After lighting a cigarette, he adds, "There are seven different ways to run a river--high water, low water, upriver with the current on your head, downriver, daytime, nighttime, and running it by radar. Once you learn those seven ways, you can run any river. We made the Pekin wiggles in one try."

17. In this sort of journey, there is no real departure or precise destination. Its structure is something like a sleeve open at both ends. Several days go by, a couple of hundred miles, and then a machine in the pilothouse suddenly springs to life as if it were the tenth member of the crew. Staccato and syllabic, its voice blurts out, "You . . . have . . . ree . . . ceived . . . new . . . orr . . . derrs. . . Please . . . ree . . . view . . . them . . . as . . . soon . . . as . . . poss . . . ibb . . . bull." A printout comes forth like a tongue. Upriver in a day or so, we will be turned by the Ashley Lay. On the Mississippi River, a tow might consist of forty-nine barges in seven strings--a vessel more than fifteen hundred feet long and nearly two hundred and fifty feet wide. The diesels pushing it will develop as much as ten thousand five hundred horsepower. To enter the Illinois River and not plug it up forever, the numbers have to go down to fifteen barges and, say, thirty-six hundred horsepower, like the Billy Joe Boling. Nearing Chicago, the waterway becomes tighter and flatter (less current) and you don't need the Billy Joe Boling anymore. You want the Ashley Lay, twenty-eight hundred. Even closer to Chicago, where concrete walls close in on the waterway and bridges don't draw, "jackoff" boats take over. For dipping under bridges, their pilothouses go up and down hydraulically. They move six or eight barges at a time. On a boat with the power of the Billy Joe Boling, you go up the river until another crew turns you. You pick up their barges and go back down to the Mississippi, where, say, you turn the Edwin A. Lewis and the Edwin A. Lewis turns you. Then you go back up the Illinois.

18. Ours are Memco Barge Line barges. Memco moves upward of two thousand barges on Middle American rivers and is third in a very large field. When I called Memco not long after sending the company a formal request for a ride, Don Huffman, in St. Louis, said, "What day would you like to go?" It was as if I were talking to Southwest Airlines. Tows are moving about the country all the time. When and where would I like to get on one? I flew to St. Louis, and went up to Grafton, where the Billy Joe Boling came along after a while and picked me off the riverbank with a powered skiff. Some five hundred miles later, the skiff would put me ashore in the same place. In an equal number of days last year (and by daylight only), I rode six times as far in a tractor-trailer. Faster, certainly, but barge companies are committed to pointing out that a fifteen-barge tow like this one can carry what eight hundred and seventy tractor-trailers would be carrying on highways. This comparison is not without precedent. In 1805, barges on the Middlesex Canal, in Massachusetts, transported more than nine thousand tons of freight, and it was said that if the same freight had travelled on dry land fifty-six thousand oxen would have been needed to move it.

19. Six a.m. of the forward watch and Tom Armstrong--the captain himself--is at the sticks. The voice in the machine has been sounding off, and I am wondering about the changing of orders and the turning of tows. "How long do you usually know what's going to happen?" I ask him.

20. "Usually there's no usually in towboats," he answers.

21. He lights a Marlboro. He is thirty-nine--the fifth oldest in the crew of nine. His jeans are patched in the seat and he wears an aquamarine T-shirt lettered "Gecko Hawaii Pro Surf Team." Of medium height and strongly built, he has a precise, navigational mustache. He is left-handed, his hair is brush cut, his vision is 20/13. His eyes, remarkably bright, seem to project forward as horizontal periscopes. He has a constant, knowledgeable smile. "Towboating--it grows on you like a wart," he says. "See what I'm sayin'?"

22. Fond of that question, he repeats it many dozens of times per day. Phonetically, it emerges as "See what I'm sane?"
23. The sun appears above the trees, and Tom says, "Every day is a holiday, every meal a banquet. Got it made. Just don't know it." Another mantra. Another Marlboro. Sixteen years ago, he was a green deckhand on the lower Mississippi. He has held the rank of captain eleven years, working all rivers, mainly this one. His competence seems as absolute as his youthfulness seems indelible. Holding the sticks, he sits on his seat with his legs curled up under him, like anybody's grandson.
24. Captains all "come up through the deck," as the expression goes--the towboaters' equivalent of the merchant mariners' "coming up the hawsepole." After working as a deckhand for two years, you can get a steering license. After you steer under a captain for eighteen months, you are eligible for a pilot license. You pass the physical, the radar training, and the simulator class in Paducah. A new, framed certificate appears on a bulkhead in a pilothouse somewhere: "William Thomas Armstrong . . . is licensed to serve as operator of uninspected towing vessels upon western rivers."
25. Tom is not hesitant to call the work stressful: "It takes good nerves to come down on a bridge sideways--I'm not sure I want to be out here driving a boat at sixty-five." He tells a story about a doctor who rode a towboat on the lower Mississippi to do stress tests on the captain. In the middle of the testing, the doctor was so stressed he asked to be taken off the boat. "One captain dropped out of medical school because his father died, and he came out here and was still here thirty years later," Tom goes on, in free association. I ask him how many skippers are women. "Two women worked their way up to the pilothouse," he says. "One of them is still out here, the other hit a bridge."
26. We are surrounded by glass in the pilothouse, large windows on all four sides. Our eyes are thirty-six feet above the water. The pilothouse smells like a bar under the old Third Avenue El. It is not a beer smell. Alcohol is forbidden and there is no evidence of it in sniff or behavior on the Billy Joe Boling. The pilothouse, which is swept and scrubbed clean every day, so reeks of tobacco smoke that the smell seems painted on the air. This is because Tom is a chain-smoker and Mel just smokes a lot. Between them, they are in the pilothouse twenty-four hours a day. Others in the crew are also present here for varying lengths of time. Seven of the nine are smokers. Gene Diebold, the chief engineer, comes up to the pilothouse in the evenings to sit and look at the river. The chief, as everyone calls him, is a round and pleasant man, about sixty, a onetime automobile mechanic who has developed hearing loss in his eight years on the rivers. A Missourian, he grew up in Benton, south of Cape Girardeau. He says he has "no high-pitched hearing left; if several people are talking, I can't understand a thing." Yet he generally ignores the large-cup ear protectors that hang on pegs outside his engine room, preferring inserted plugs. You see him in there with a blue-and-white towel wrapped around his head as if he were out here to hide from Homeland Security. The chief, as it happens, is allergic to tobacco smoke. But that does not alter his affection for the pilothouse and his evening contemplation of the river. By 9 p.m., Tom is past the second pack of his day. Tom says, "It's hard to find people who don't smoke these days. They tried to set up a boat that would be a non-smoking boat, but they couldn't find the crew members, see what I'm sane? Cigarettes aren't bad for your health, just ask the tobacco companies."
27. Mel and Tom, in the course of their watches, both dip snuff. They dip mint-flavored Skoal. They dip wintergreen long-cut Timber Wolf. Tom offers me some, and supplies instructions. I haven't smoked a cigarette in forty years, let alone dipped wintergreen Timber Wolf. I put it inside my lip and soon feel as if I've had a five-shot latte. Tom confides, "I dip snuff to try to cut down on cigarettes."
28. Six hours a watch is a long time for him and Mel to be up here, their hands on or close to the sticks. They can't leave and go below when they need to urinate. So a toilet is a part of the furniture in the pilothouse--open, unscreened. It's just there, in one corner, like the radar. At first I felt I shouldn't use it. For the skipper to pee in my presence somehow seemed politically correct, but not vice versa. I got over that in the first thirty-six hours, and have been peeing up here in the pilothouse as if the toilet were a bush on a fishing trip.

29. "There are two places in the world--home and everywhere else, and everywhere else is the same," Tom says, looking out at the levees, the miles of river, the willows, the cottonwoods, the silver maples, the roofs of small, concealed communities. Tom is from Cadiz, in western Kentucky. "Kay-diz," he says, his accent on the "Kay." "It's a two-stoplight town" less than twenty miles from Tennessee, on Lake Barkley of the Cumberland River. He went into the Army without finishing Trigg County High School (Class of 1983), and out of the Army into towboats, on which he now makes sixty-some thousand dollars for working half the year. "I make pretty good money," he says. "Out here is a pretty good job. The money and the time off attract all of us. If we're not out here, we're not going to be no professor in a college, we're going to be in a factory five, six days a week. A factory worker, if his job is to put this screw in that gun, that's what he does all day every day for twenty years. Imagine how old that would get."

Entrepreneurial, conscious of world money markets, schooled in the biographies of historic capitalists, Tom owns and rents out "a couple of dozen units" (rooms, houses, agricultural acreage), and additionally owns a hundred-acre farm with twenty beef cattle on it. While he is away on the Billy Joe Boling, his wife, Debbie, manages the property. Also a library clerk, Debbie is Tom's third wife. Separately and together, they have had no children. When Tom is at home, and is not making rounds on his motorcycle from one unit to the next, he is probably out on the Cumberland River piloting his ski boat.

30. We are two hundred miles up the river and approaching Hennepin, ninety minutes--seven more miles--upstream. This tow has about as much contact with the towns it passes as a tractor-trailer does on I-55. To the Hennepin Boat Market we have faxed ahead for food. We don't stop for much but navigation locks. Almost everything is brought to us by service boats as we drive on. However, we need to dock at Hennepin today to take on water.

31. The deckhands of the forward watch are straining at their cheater bars, revolving the ratchets that tighten the cruciate, interbarge wires, which are strung horizontally among timberheads and cavel, and in most places are only a couple of inches above the decks and gunwales of the barges. The deckhands are tuning the tow like a piano, and the work is beyond heavy. Closing pelican hooks, putting keepers in place, cranking ratchets, they make the wires so taut that if they stand on them the wires don't touch the deck. As we look down on the deckhands from the pilothouse, Tom takes a drag on a Marlboro, emits a gray cloud, and says to me, "If you didn't go to school and get a good education, you'd be out there working your ass off tightening them wires."

32. Rick Walker and Jason Beuke are the deckhands of the forward watch. Jason, of Paducah, is a two-tripper, this being his second trip ever on a tow. A wrestler when he was in high school, he weighs three hundred pounds. He carries it easily. Rick lives near Golconda, Illinois, close to the Ohio River. If you did not know him, you might say he has a demeanor that is vaguely sinister. If you do know him, you would probably say that he likes to give that impression. Thirty-four years old, fatless and wiry with dark bright eyes, he may not yet have met his first barber. An almost unceasing worker twelve hours each day, he is the Billy Joe Boling's second mate. Tom Armstrong refers to him as "the black-haired dude."

33. Rick is paired with Tom and Jason manning this immense vessel from five-thirty to eleven-thirty in the morning and five-thirty to eleven-thirty in the evening, the punctually observed hours of the six-to-twelve watch. If Rick is not out checking barges, tightening wires, or straightening up the captain's room, he is generally up here in the pilothouse polishing the windows inside and out, shining the metal surfaces, thickening the smoke. He takes note of my routines with unconcealed contempt, in part because I don't have any. I get up about when he does, a little before 5 a.m., awakened by knocks on my door by a deckhand on the twelve-to-six watch. After a fast breakfast in the galley, I climb to the pilothouse, arriving usually as Mel turns the sticks over to Tom. Since there is nowhere to go--no long, Emersonian walks among the fifteen barges--I sit or stand in the pilothouse sixteen hours a day, staring at the river with an open notebook. Rick Walker makes clear that he looks upon this as idling in the nth dimension. One morning, he said, "Why don't you pick up a broom and do something useful?" At the end of my sixteen hours, when I stir to go below, he will say with incredulity, "Don't tell me you're going off to bed," accenting the "bed" as if it were a synonym for cowardice. Rick and Tom are not out of synch. When I

mentioned that I have a fishing shack up a river somewhere, Tom said, "It's probably ten thousand square feet."

**34.** Meals are the bright punctuation of the day out here, never mind that dinner is at eleven in the morning, supper at five in the afternoon, and breakfast in the creeping dawn. The after watch eats at those hours and goes to work. The forward watch eats some minutes later and goes to bed--everybody sleeping and everybody working twice a day. Everybody but Bryan Velazquez, who is called upon when needed--mainly in navigation locks--and has to be available twenty-four hours a day. After a dinner of round steak, brown gravy, okra, hominy, green beans, and mashed potatoes, Tom remarked, "They feed us slaves like kings. Fish Friday, steak Saturday, chicken Sunday--towboat tradition." A sled dog would understand how long it takes us to finish. The galley is behind the engine room at the rear of the main deck and to get there you walk a narrow route along guard chains beside the river. You fill your plate and sit at a counter, all diners facing in the same direction. When I first sat down there, the cook, Donna Hobbs, told me to take my hat off when I eat.

**35.** Donna is highly regarded for smoking only behind the counter and not over the stove. Eighteen years on various rivers, she is from Paducah now, but she went to Jefferson High School in Rockford, Illinois. She wears flip-flops or thick-soled white running shoes, sweatpants, T-shirts, an embroidered square-neck short-sleeved cream blouse. Her hair is blond and she keeps it in a ponytail. If she is making cinnamon buns, her day begins at two-forty-five in the morning. No cinnamon buns, she gets up at three. On Sunday mornings at breakfast time, she is not in the galley. On Sunday mornings, she is allowed "to sleep in," and she gets up at 7 a.m. to prepare dinner. "I sleep in shifts," she remarked one evening at six when I lingered in the galley to talk to her. Finished for the day, she said she was going to take a shower and watch "The African Queen." The story is appealing on a towboat and she has watched the movie innumerable times. We talked about Bogart and the leeches, Bogart at the end in the reeds. She said it was amazing how fast he fixed that prop when he dinged it in the rapids. Donna is a quarter Cherokee. "You can see it in my high cheekbones," she said, turning sideways in her Kentucky Wildcats T-shirt, a gold cross hanging from her neck. She has a tattoo on her right arm--a dream catcher on a bear's claw around a bear's head. It filters out bad dreams. She was divorced in 1987, after which she lived with a man nine years. She told him to do what he wanted when she was on the boat but not to run around when she was at home. He didn't.

**36.** Two buzzards circle the tow. Tom, steering, looking up at them, says, "They know who the cook is on this boat. They're waiting for one of us to die." This is outrageously unfair to Donna, and he knows it. "Some cooks are young," Tom goes on. "The company, they prefer the Fifty-five Club--fifty-five years old and fifty-five pounds overweight, see what I'm sane?" He mentions a regular cook on the rivers who is in her upper seventies. He also mentions Granny, whose real name is Mary. "There are fewer young ones than men cooks," he continues. "They call them in for an interview, see that they're young and beautiful, and she isn't hired. The company, it isn't their first rodeo, see what I'm sane? If she's young and beautiful, she has to be smarter than the average bear to survive. Good-looking woman, the men are like buzzards on a fence. If there's a young cook, the buzzards are sane, 'These are the best hot dogs I've ever eaten.' An old woman, she could serve them a six-course meal and they'd bitch."

**37.** Along the riverbank just below Hennepin, we pass two dozen covered barges, loaded with grain at the Hennepin elevator and now moored in fleets waiting to be picked up. Some are tied to trees, some to massive chunks of concrete set in the bank. Old propane tanks serve as mooring floats. Wires from the moorings are tied to three bunched auto tires whose collective elasticity is neither too great nor too modest to control the wayward lurchings of two thousand tons of loaded barge. Chains large enough to anchor oceangoing ships in turn connect the tires to the concrete chunks in the bank or are looped around cottonwoods and maples. We tie up the tow, detach the Billy Joe, and run in to the Hennepin dock. Backed into a berth beside the dock is the Robert J., a condensed general store that is a small boat in itself, and ordinarily would come out on the river and attach itself to the running tow. Spectacularly varied, crowded with goods, it is stocked with everything a towboater might need or find attractive--a video, for

example, called "Oral Orgasms" and subtitled "Carpet Munching Extravaganza." Close by "Oral Orgasms" are Scientific American and a 20-gauge shotgun up for raffle. Mark Judd, big and friendly, runs the Robert J. When towboaters telephone or fax ahead for something he doesn't have, he will go and get it--sometimes driving considerable distances--and he charges nothing for the service. He collects their prescriptions, goes off and fills them. If your tooth is aching, he will take you to the dentist. Heart? Liver? Duodenum? He will take you to a doctor. He went to a Wal-Mart once to buy Mel Adams a pair of glasses. He gives the towing companies a long rope. A towing company once owed him three hundred thousand dollars. Donna Hobbs, shopping in Mark's store, runs an eye over the porn shelves but does not bat it.

**38.** The Hennepin Boat Market, up the levee and into the town, is also owned by Mark Judd. It is the only bulk grocer serving the river's vessels in three hundred miles. The check-off shopping lists we get from them by fax say that Hennepin Boat Market "provides a 25-hour, 8 days a week, 53 weeks a year midstream grocery delivery." With Tom's permission, while he is taking on water and supplies, I walk a loop through the streets of Hennepin--a spread-out town of open spaces, with contiguous lawns, few sidewalks, and almost no fences, as if the houses were married quarters on a naval base somewhere, the dead silence of nine in the morning broken only by birds in the oaks and maples. Seven hundred people live in Hennepin, which is named for a priest who accompanied the Sieur de La Salle portaging out of Lake Michigan and into the Illinois River system in 1679. Father Hennepin, chronicler of the expedition, is described in James Gray's "The Illinois" (Farrar & Rinehart, 1940) as "a vain, pretentious priest who claimed the achievements of his betters" and "made love to himself on paper." I am late returning to the Billy Joe Boling, which has taken on its water, stowed its provisions, and for fifteen minutes has been ready to go. Tom, in the pilothouse, 9:30 a.m., supposes aloud that I have been to a bar. Add that to my ten-thousand-square-foot fishing shack, and I have suddenly become a rich alcoholic. Tom has had his wife, in Kentucky, check me out on the Internet. Now he says on the phone to her, "He's got a couple of daughters. Check them out, too. See if they robbed a bank or a liquor store."

**39.** When I told my friend Andy Chase that I was coming out here, he said, "The way they handle those boats--gad! They go outrageous places with them. The ship handling is phenomenal." Andy is a licensed master of ships of any gross tons upon oceans, and he is also a professor at Maine Maritime Academy. His credentials notwithstanding, he said he would envy me being here. This tow is not altogether like an oceangoing ship. We are a lot longer than the Titanic, yes, but we are a good deal lighter. We weigh only thirty thousand tons. Yet that is surely enough to make our slow motion massive, momentous, tectonic. Fighting the current with full left rudder and full left flanking rudder in the eighty-degree turn at Creve Coeur Landing, Kickapoo Bend, Tom Armstrong says, "I'm trying to get it pointed up before it puts me on the bank. There's no room for maneuvering. You can't win for losing. You just don't turn that fast. You just don't stop that fast. Sometimes we don't make our turns. We have to back up. The Illinois River's such a tight-assed river."

**40.** We are anything but alone. In addition to pleasure craft, other long tows are before us and behind us on the river, like a string of airliners on final in a long line to Newark--the Austin Golding, the Frank Stegbauer, the Martha Mac, the Tamera Pickett, the Starfire. With this difference: another succession of thousand-foot tows is always coming toward us in the opposite direction, sharing the same channel in the same small river. Tows moving downcurrent have the right of way. If you are headed upstream, you have to pull into a hold-up spot and wait for them to go by. Hold-up spots, in some parts of the river, are far between. Both Tom and Mel have their own copies of the "Illinois Waterway Navigation Charts," a publication of the U.S. Army Corps of Engineers. They have identified hold-up spots that will work under present conditions, and have marked them in pencil--places ample enough for putting the nose into the bank without blocking the river. When you are waiting for another vessel to pass, you literally stick your head into the mud at the edge of the river and hold there obliquely ( / ). Places are rare that are wide enough for two to pass while both are moving.

41. Trains run under centralized systems. These people are self-organized, talking back and forth on VHF, planning hold-ups and advances, and signing off with the names of their vessels: "Billy Joe Boling southbound, heading into Anderson Lake country. Billy Joe Boling, southbound."
42. This is known as "calling traffic."
43. "Billy Joe Boling heading down toward the Marquette Bar. Billy Joe Boling heading toward the Marquette Bar. Billy Joe Boling."
44. A deep-voiced acknowledgment comes into the pilothouse: "Billy Joe, Jon J. Strong." The captain of the Jon J. Strong has got the message.
45. "Billy Joe Boling heading southbound into Abe Lincoln. Billy Joe Boling."
46. For anyone within VHF range, this means that the Billy Joe Boling is soon to pass under Interstate 39's Abraham Lincoln Memorial Bridge. It means "I'm coming down, get out of my way." At Abe Lincoln, the river bends ninety degrees and soon goes under a second bridge.
47. Tom calls to another captain, "You'd better give them a shout down there before you get committed." In other words, before you proceed you need to know that the river is open to--and including--your next manageable hold-up spot. St. Louis to Chicago, Chicago to St. Louis, this is like jumping from lily pad to lily pad. It is also reminiscent of the way that airplane pilots in flight constantly study their charts, picking out airports where, if need be, they can make an emergency landing. "We don't try to plug up a hole and then try to get in the hole," Tom Armstrong says. "It don't make for a good day. We have to move from hold-up spot to hold-up spot and not think we're going to get in one when someone else is in it. On-the-job training is the only way to learn this."
48. On the job calling traffic--and in the interest of making time at the expense of others--some captains learn to deceive. As Mel Adams puts it, "They sometimes lie. They lie in both directions."
49. No one is going to be lying when two moving tows, in adequate water, are passing. The captains say to each other, "See you on the 1," or "See you on the 2." Passing on the 1 always means that both boats would turn to starboard to avoid collision. Two boats, meeting and passing on the 1, will go by each other port to port. Therefore, passing on the 1 in opposite directions is different from passing on the 1 when overtaking. Passing on the 1 when overtaking is to go by the other boat's starboard side. The stand-on vessel, nearly always the vessel heading upstream, maintains everything as is. The action vessel maneuvers. If you are learning this on the job, you may by now be up a street in Peoria. If you are still on the water, you may be feeling the hydraulic effect of the other tow sucking you toward it. One of my notes says, "The Mark Shurden with three barges carrying black oil passes us and sucks our stern, swinging our head toward the red buoys." The riverbank is variously wicked and benign. It can pull you in or fend you off. Mel says, "There's a real fine line between bank cushion and bank suction. An extra five feet and it sucks you right over to it. You've got to stop and break the suction," while the Billy Joe shudders with cavitation.
50. Approaching a ferry, Mel on the VHF volunteers to drift while the ferry crosses the river. The ferryman says, "Keep her coming. I don't want to slow down the economy." The economy goes past the ferry doing four miles an hour. Tom says the tow moves more gracefully when it is going downstream: "It slides more, and is more dangerous, going down--at bridges, for example, with the current on your stern--but it's more graceful, and you have the right of way. Going upstream, it's easier to stop if you have to." Flanking is a downstream move. You slow your engines at a bend and let the current push the tow around. "Every bend is a challenge, though. You're pushing it to the max every day--pushing the drafts, toting the heaviest barges you can, going as fast as you can." Going deep is "steering as close to the outside of a bend as you can and still make the turn." It is what you would do in a canoe in a small stream, and this canoe is longer than the river is wide. "So shallow and so small, this river is more difficult to navigate than the Lower and the Ohio," Tom says. The Lower runs past Memphis, Vicksburg, and New Orleans.
51. They use the searchlight all night, a thousand watts, its beam a bright cylinder through the saturated air. It picks out green can buoys and red nun buoys--reds on the right going north. Not all the



buoys are always in place. Picking his way in the dark across the seventeen broad miles of Peoria Lake, Tom describes what he is doing as "an Easter-egg hunt." The white beam is galactic with bugs--enough mayflies, it seems, to feed all the trout in the Rockies. Elsewhere on the river, missing buoys have been dragged away by tows. "This is like driving a car with your damned eyes closed," Tom says. "If you run aground, try to be going slow enough so you can back off." The Coast Guard buoy tender Sangamon passes us, pushing a small barge. On the deck, lined up like naval ordnance, are row upon row of new green and red buoys.

52. The swing indicator in the pilothouse measures the degrees to port or star-board that the tow is turning. Also close around the person at the sticks are the fax, the cell phone, the computer, the radar, the AM-FM radio, the tape player, the Qualcomm, two depth finders, two VHF marine radios (in order to monitor two channels), the G.P.S., the searchlight controls, and the general-alarm switch. There is no need for a compass, heaven knows, and--given the swing indicator--no need for a gyroscope. Knotted rubber cords hold back the books on the shelves under the fax. This vessel will wait a long time to ride its first swell, but when the Billy Joe Boling goes around a bend and its stern gets close to the bank and the wheel wash strikes the rudder, the vibration could sift a silo.

53. Coming up in the evening for his look around, the chief engineer says we are burning about twenty-four hundred gallons of diesel fuel a day. Not bad. We are getting nearly two hundred feet to the gallon. As a rule of thumb, a towboat burns one gallon per horsepower per day, but--at thirty-six hundred horsepower--that's not our thumb. The Billy Joe Boling has a tank capacity of sixty-two thousand gallons. We do not need anything like that amount of fuel but we fill her up anyway because we prefer not to "burn light." Tom says, "The lighter the boat gets, the sloppier it steers." It is best that the tanks not be less than half full. Putting that another way, diesel fuel is in use as ballast! As the barge industry is always ready to point out, in fuel consumed per ton-mile a tow is about two and a half times more efficient than a freight train, nearly nine times more efficient than a truck.

54. There are five dams on the Illinois River, none very high. Some are weirs, really, consisting largely of steel-and-timber wickets that can be lowered in high water so that tows can ride right over them, ignoring the navigation locks off to the side. In its two hundred and seventy-three miles, the river drops about ninety feet, indicating that the state of Illinois is almost as flat as it looks, its state-crossing river dropping down to the Mississippi six inches per mile.

55. At the higher dams, the navigation locks lift us or lower us about ten feet. "Locking through," the term that has described the process since the sixteenth century, is not, on this river, a simple matter of drain valves and filling valves. The locks consist of a "short wall," aligned with the current and standing in the river, and a "long wall" (or "guide wall") running along the bank. The short wall is rounded off at each end, a configuration known as the bull nose. The barges, three abreast, have five feet of clearance between the short wall and the long wall. The lock is six hundred feet long. Our vessel is nearly twice that. What to do?

56. Gingerly, you inch your thirty thousand tons up there past the bull nose. If you are heading downstream and you come in at too much of an angle, your head can become wedged between the short wall and the long wall while your stern is swung around by the current, with the result that your vessel becomes a lever prying at the navigation lock until masonry breaks, wires snap, loose barges are draped all over the dam, and your Billy Joe Boling, whatever it may be called, is hanging on the brink and listing.

57. You inch your tow up the long wall until nine barges are in the lock, and then you cut your vessel in half. You undo the wires at the break coupling. With the aft six barges, you back out. A door closes, sealing off the lock chamber. The drain valves are opened. The nine barges are lowered. Another door opens, and a mule--a wire on an electric winch--hauls the nine barges down the long wall to timberheads, where they are moored. The lock is refilled to receive the rear half of the tow. When it rejoins the front half, deckhands start leaning into their cheater bars at the limits of their strength, in all seasons and weathers, turning the ratchets that tighten the wires and restore the vessel to its complete integrity. You don't do this in ten minutes. We spend hours in the locks, and more hours near the locks waiting our turn.

For smaller tows, there are rearrangements like the knockout single and the set-over single that pack all components into the lock at one time, but we are vastly too large for that. The term for what we do is "double lockage."

58. Of Peoria Lock, Mel Adams says, "This is a tough lock to get into southbound when it's running some water. You get your head in there and it wants to suck you over towards the dam, bad. If they're running more than three feet of water through the dam, get a tug. The tug puts the head end up against the wall, pins it on the wall, lets you get your head inside the bull nose, and you can get your stern in with your engines. If you don't have the tug, you can get wedged in, and the current takes the stern around and the barges break up and go into the wickets."

59. Below the lock at La Grange, and close to it, the rush of heavy water through the wide-open tainter gates of the adjacent dam is creating an eddy, which Mel--northbound here--calls a whirlpool. It turns clockwise, swinging around from the foot of the dam and running into the bull nose. Mel is inching up there, pushing his port head toward the long wall, his starboard head toward the bull nose. He could get over on the long wall, catch a line on the port lead barge, and rub this footprint aircraft carrier up the long wall, but that does not seem to be his default mode of ship handling. Maybe he can just go in there in one shot, and if he gets lucky he won't have to catch a line. The mate, Carl Dalton, will not have to humiliate him by throwing an assistive rope around a timberhead.

60. Carl is on the port head as the tow moves upriver. Mel says to him on the walkie-talkie, "They're all out at the dam. It won't be lookin' purty when I get up there."

61. Carl calls off distances, long and short. Distance from the long wall. Distance from the lock gate. Distance from the bull nose. "Two hundred and fifty to the bull nose."

62. "I have to have the head on the wall to get it inside the bull nose," Mel mutters to himself. "You don't want to wedge in there. You could tear up barges, tear up the gates on the lock." But nobody needs to catch any lines as the huge vessel slides by the thundering rapids, absorbs the shock of the eddy, and aims for its five feet of clearance between the two walls.

63. "One hundred to the bull nose."

64. "Fifty to the bull nose."

65. "Even with the bull nose."

66. The tow, having smothered the whirlpool, now moves up between the walls and into the lock chamber.

67. When it stops there, Carl says, "The head never got more than a foot off the wall."

68. Mel says, "Sometimes you just get lucky."

69. Off Mayo Island, Ottawa, in pitch darkness, the Ashley Lay turns us and we turn the Ashley Lay. If we were in the Hudson River and had started at the mouth, we would be in the Adirondacks. The six strings of barges lie abreast, and the Billy Joe Boling keeps them in place, its light beam aimed at the bank and holding steady on the trunk of a tree. Mayflies--fewer here--go through the beam like comets. A heron goes through like a stork. In a curious ritual, the Ashley Lay picks up our head gear--running lights, flagpole, heavy nylon lock lines--and carries it to the head of our new tow. We hand over their groceries. They give us a wad of cash. We take their head gear with us to the upstream end of the strings, where we drop it off, then wire up to the new tow, facing downstream toward the Mississippi.

70. In the thousand feet of barges we now have before us are grains for export, corn for Baton Rouge, and coke for Kentucky. We brought twelve thousand tons of coke up the Illinois River and now we are pushing fourteen thousand tons of coke down the Illinois River. Tom Armstrong, coming on watch at 5:30 a.m., takes this in, and says, "One day, they'll figure it out and put us out of a job."

71. Mel Adams at the sticks in a long straight stretch of the river. A white cabin boat is in mid-channel directly in front of us, about three thousand feet away. It is not moving. We cannot see people aboard. For Mel, there is no possibility of maneuver, no possibility of stopping. Surely the cabin boat will move. Referring to our blunt head end, three barges wide, Mel says, "When they see a hundred and five feet of steel coming at them ten feet high, they'll get out of the way."

72. They do not. Mel, with binoculars, thinks he may have glimpsed a swimmer's head in the water, but that could have been a trick of the eye. As we bear down to two thousand and then fifteen hundred feet, the cabin boat stays where it is, dead in the water, less than two minutes from destruction. Mel gives it five short blasts, the universal statement of immediate danger. At just about the point where the cabin boat would go into our blind spot--the thousand feet of water that we in the pilothouse can't see--people appear on the cabin boat's deck, the boat starts up, and in a manner that seems both haughty and defiant moves slowly and slightly aside. We grind on downriver as the boat moves up to pass us port to port, making its way up the thousand feet of barges to draw even with the pilothouse. Two men and two women are in the cabin boat. The nearest woman--seated left rear in the open part of the cockpit--is wearing a black-and-gold two-piece bathing suit. She has the sort of body you go to see in marble. She has golden hair. Quickly, deftly, she reaches with both hands behind her back and unclasps her top. Setting it on her lap, she swivels ninety degrees to face the towboat square. Shoulders back, cheeks high, she holds her pose without retreat. In her ample presentation there is defiance of gravity. There is no angle of repose. She is a siren and these are her songs. She is Henry Moore's "Oval with Points." Moore said, "Rounded forms convey an idea of fruitfulness, maturity, probably because the earth, women's breasts and most fruits are rounded, and these shapes are important because they have this background in our habits of perception. I think the humanist organic element will always be for me of fundamental importance in sculpture." She has not moved--this half-naked maja outnakeding the whole one. Her nipples are a pair of eyes staring the towboat down. For my part, I want to leap off the tow, swim to her, and ask if there is anything I can do to help. We can now read the name on the transom behind her: Empty Pockets II.

73. This is happening between Brushy Lake and the Six Mile Slough, if you see what I'm sane. Pleasure craft are anywhere, everywhere up and down the river. We traverse a reach in Peoria through the Cedar Street Bridge and the Bob Michel Bridge and the Murray Baker Bridge among at least two dozen pleasure craft spread over the river and framed between the arches. Pontoon boats, jet boats, powerboats--they go into the locks behind us, ahead of us. At the 89 bridge, Mile 218, a marina is on one side, a boat launch on the other, and twelve pleasure craft are visible, eight coming toward us, and who knows how many we can't see. Pleasure craft are like the bugs in the searchlight beam. On Peoria Lake, some of them are under sail. Southbound, a three-deck cruiser called Bewitched comes down on the Marquette Bar. "See you on the 2 whistle," says Bewitched, as if he were a thousand feet long. Above the Marquette Bar, forty-some pleasure boats are beached along a sand strip like white walruses. A boat crosses in front of us dragging two small kids on a tube. When pleasure-craft numbers get really high, a deckhand is sent to the head of the tow as lookout.

74. The wheel wash of the Billy Joe Boling goes out astern like a No. 10 rapid in the Grand Canyon, which "cannot be run without risk of life." The class of the rapid counts down, of course, with distance from the stern, and jet boats and jet skiers, playing in the wake, flirt their way forward through the rising levels of risk. If some macho jet skier were to cut in close to the stern, he would fast become soggy toast. Pleasure craft constantly cross in front of us, too, and when that happens Tom Armstrong will say, "He has a lot of faith in his engine, doesn't he."

75. Slow as tows are, they sometimes hit pleasure craft, although it is usually the other way around. A skier or boat that comes in from the side to jump the wake can be sucked into and through the propellers. If a water-skier falls a thousand feet in front of the tow, the skier has sixty seconds to get out of the way or the skier can go under the entire tow and into the propellers. As a pleasure boat passed us one day dragging a small boy on a tube, Mel said, "If the line broke, that little boy would be sucked right into the wheel wash." While Mel was crossing Peoria Lake a few years ago, a boat with a water-skier disappeared under his head and reappeared without the water-skier. Then the boat turned around, disappeared again, and reappeared dragging the skier out of the way. A day or so ago, we came down on a fisherman in a flatboat with an outboard motor, fishing in the middle of the channel. Mel, with binoculars, saw him tugging and tugging at his starting rope. Another fishing boat threw him a line and saved him. "People

dropping skiers right in front of us, people falling off their jet skis right in front of us--it's enough to make a nervous wreck out of me," Mel has said. "Pleasure boats sometimes raft together, drinking beer, paying no attention, drifting down the channel. Get too close to 'em, you put a suction on 'em and pull 'em right to you. I get so dang worried that I'm going to run one of them over, kill someone. I couldn't live with myself."

**76.** If the head end is running a notch or a spike, a pleasure boat coming up behind us with intent to go around us can be lethally surprised. A notch is one missing barge. A spike is a barge at the head of the center string with notches on either side. Tom tells of an accident in which an intoxicated man was letting his kid drive their boat and the kid raced up the starboard side of a tow that appeared to him to be four barges long. Sharply rounding the fourth barge, swinging to his left to cut in front of the tow, the kid suddenly, and--too late--saw a fifth barge, a spike, at the head of the center string. After crashing into its side, father, son, and boat were plowed under the starboard string. Of the operators of pleasure boats of all sizes, Mel says, "They are ignorant, ignorant, ignorant."

**77.** The crew of the Billy Joe Boling is always mindful of pleasure craft, in no small measure because they are forever hoping for "tit shots." This, I think, was the first towboater term I learned after coming aboard. It bounced off the windows of the pilothouse from dawn until dark every day. But nothing happened. From each of many hundreds of pleasure craft, there was nothing even suggesting a tit shot. I thought the captain and the crew were fantasizing, on their way to hallucinating, and probably should be committed. Now, though, Empty Pockets II, which slowed up as she drew abreast of us, puts on a burst of speed and curls around our stern and through our wake. Coming back to us on the starboard side, she picks up even more speed, and races down before us on wings of white spray.

**78.** I say to Mel, "I thought that was just a myth--that it didn't happen."

**79.** Mel says, "It happens all the time."

**80.** Another clear, warm day, and Carl Dalton is painting the tow knees with Doug Gable. The tow knees are two flat columns of steel--taller than Carl or Doug--that stand on the towboat's squared-off bow and butt up against the barges it is pushing. Mel Adams, steering, looks down from the pilothouse, thirty feet above, and communicates with Carl by walkie-talkie. He is telling him, inning by inning, how the Cubs are doing against the White Sox, and how much cork the Cubs are using today. Carl, the first mate, is in equal measure strong, responsible, funny, and upbeat, always greeting with evident pleasure the gruelling physical day that begins at midnight and includes two six-hour watches. Doug, from Granite, Oklahoma, his face a ten-o'clock shadow, his teeth not altogether present or accounted for, his longish hair flowering behind his red baseball cap, suggests the legacy of the Western mountain trapper. Fourteen days off, twenty-eight days on, he used to take a Greyhound from Oklahoma to Kentucky to report for work, but for this trip he bought himself a car. He dropped out after two years at Western Oklahoma State and worked as a driller and blaster in rock quarries before becoming a deckhand on towboats. The phone rings in the pilothouse.

**81.** The crew dispatcher in Paducah asks to speak to Carl Dalton. Mel relays the word to Carl, who leaves the main deck and climbs the interior stairs to the pilothouse. Mel turns off the baseball game. Carl says hello to the crew dispatcher and listens as the dispatcher asks him in some detail about a guy he hopes to sign up as a deckhand. After listening for at least three minutes, Carl says, "He's over thirty years old and he sleeps with a night-light." There is an extended silence in the pilothouse as the dispatcher continues to speak to Carl. Then Carl says, "He's not much on the working thing." An even longer silence follows as Carl patiently listens to Paducah. Then Carl says, "I don't want him on here."

**82.** The crew dispatcher works for B&H Towing, which leases its boats from Memco, which then charters the boats; and that, in the words of our captain, "is how they busted up the unions out here." The hunt for willing-and-able deckhands is a difficult one for the dispatcher, as Carl--third-ranking person on the Billy Joe Boling and invaluable himself--is much aware. When guys are riding to Paducah for their fourteen days off, the company will call them in the van to see if they want to go at once to another boat. Carl lives in Wickliffe, about thirty miles from Paducah. He played his basketball at Ballard Memorial

High School, where he dropped out in 1980, he says, "like a fool." He knows everybody. At breakfast one day, he told me, "There's not that many blacks in Wickliffe, but we're all kin."

**83.** The work is hard on deck anytime, he said, but especially in winter. The tows punch and punch again at the ice to break a trail. Sometimes at dusk they can look back and see where they started at dawn, while the deckhands tighten wires in snow or freezing rain. "You go out there to jerk up a ratchet, you fall, slip, the deck is so slick." The ice on the river may be eighteen inches thick. Sometimes a trail is broken with one barge while the fourteen other barges--each tied to the next--follow the towboat "like a train on a track." Danger may be highest in winter, but it is always present. "Duckpond" is the towboaters' term for any open space among the barges where a member of the crew could fall in. The ends of some barges are squared and vertical, the ends of others bevelled, trapezoidal, raked. The rakes are for streamlining at the head and stern ends of the tow, but they may be anywhere in the assemblage, and if rakes abut in the middle

**84.** of a tow they form a duckpond. Some "oddball barges" are not quite as long as the others--a cause of additional duckponds. On the subject of hazards to deckhands, Tom Armstrong says, "Lines break, slice 'em in half like a damned banana. Or a nineteen-year-old kid falls off a head barge, goes under, and dies." The Billy Joe Boling has not had a lost-time accident in two years. What happened? "A guy was homesick. He really wasn't injured. He said he had a sprung back. Once he got off, he sprung back to healthy."

**85.** Of most deckhands, Tom says, "Even if they're sick, they get up there and do it." For their twelve-hour days, deckhands start at eighty dollars a day (\$6.66 an hour). They work their way up to a hundred and nineteen. Resourceful, hardworking, in a class by themselves, they remind me of people I knew in Alaska, with the difference that many of the towboaters are more than a little apologetic about themselves, variously confessing their small towns and calling themselves hillbillies. The Alaskans I'm thinking of saw themselves as a class apart, meant for a different geography, without much interest in the place they called the Outside. "We may not all have come over on the same boat, but we're on the same boat now," Tom Armstrong says. And Rick Walker remarks, "There's a lot of kids out here right out of McDonald's, and they'd be better off if they'd stayed at McDonald's. But if you can handle this work, you can make fifty to eighty thousand a year without a college education or even a high-school diploma."

**86.** Tom, owner of beef cattle and rental properties, spends a part of each day meditating upon incomes higher than a captain's--how large a part of each day only he would know. The part he shares is on the cassettes he plays in the pilothouse, listening to a narrator who says, "In just a few moments, I'm going to give you the formula for getting rich," and goes on to ask, "Whose drum are you marching to, even assuming you're marching to anyone's?" Repeated reference is made to "the gold mine between your ears" and to "M.S.I."--"the great key"--multiple sources of income. "Five ideas a day is twenty-five a week--that is, if you don't think on weekends." The tapes refer to "America's results coach," and they quote Oriah Mountain Dreamer in praise of people who "refuse to die with their music still in them." That is, they cause it to pour forth before it is too late. He listens to Dan Millman quoting Ashley Montagu on Bertrand Russell and the pursuit of happiness. Among Tom's favorite books--present on a shelf in the pilothouse--is "Think and Grow Rich," by Napoleon Hill, the book that resulted after Andrew Carnegie prodded Hill to study five hundred successful people. Impulsively, Tom will start up the tapes at any moment of the day or night between six and twelve. Steering the Billy Joe Boling from light to light in the dark, he listens to "Discover the Value of Lifelong Learning" and "Twenty Minutes That Can Change Your Life." On the VHF, he advises the captain of another towboat to put cattle on land that the other captain owns near Pekin. "Then it's a farm and a tax write-off," Tom explains. "That's the way to go, brother. Money ain't in the cows, it's in the tax deduction."

**87.** Doug Gable and Mel Adams are the only crew members who went to college, and Mel--with a degree in computer science and marine biology--is the only graduate. In the pilothouse, he listens to National Public Radio. When he is holding up--tow head near the bank, waiting for another tow to pass--I have more than once found him standing over the chart-book-and-radar cabinet, slowly turning pages,

taking notes. He is in deep study and appears to be plotting some sort of course, but he is actually compiling an order from a Bass Pro Shops catalogue. The threadfin shad and the brook silverside are forage fish in Table Rock Lake--that is, the white bass eat them. Mel reads to me from an article he has saved on lure colors: "In clear water, use blue-and-chrome, black-and-chrome, black-and-gold, and anything that looks like a threadfin shad. In stained water, chartreuse." His selections include the Bandit Deep Diver, the Excalibur Fat Free Shad, and some Norman Deep Little N crankbaits in gel-coat colors: sun-green shiner, sun smoky shad. Mel grew up frog gigging, crappie fishing, and noodling--catching catfish by hand from nests in the bank ("It was risky. What if a big cat bit you or the nest included water moccasins?").

**88.** Mel has a tattoo on his right arm: a skull and wings. He says, "Actually, that's a six-pack of Mickey's barrel-mouth." In the Navy, aged twenty-two or so, in San Francisco, he drank the Mickey's barrel-mouth and went in for the skull and wings. On his other arm is an island sunset, pricked on Guam. He regrets both tattoos. "It's all the go now--that and body piercin'. Back then, if you had a tattoo you were a biker or a sailor." Mel was a chief petty officer. He sailed on ships of many kinds--guided-missile cruiser, fast combat supply ship, aircraft carrier. He was six years on Guam, six in Hawaii. Aurora, his wife, is Filipina. She grew up near Olongapo, a Death March site on the Bataan Peninsula, where her parents had a fish farm. Her father was a shipwright at Subic Bay. Mel and Aurora have three teen-aged kids, one on her way to becoming a registered nurse, another a performing musician hoping for Juilliard.

**89.** Mel once piloted a tow from Corpus Christi to suburban Chicago carrying eleven thousand tons of black oil. He went sixteen hundred miles up the Gulf-coastal waterways, the Atchafalaya River, the Lower, the Upper, and the Illinois River to Lemont. And now, after one more night on the Illinois, dawn appears. He calls Aurora and awakens her. Two miles out of Peoria Lock, he is southbound, approaching Clark Dock, on the right bank, four miles up from the Pekin wiggles. The Billy Waxler, with two barges, is tied to the Clark Dock, so Mel, in his words, is "favorin' them red buoys" along the left side of the channel to give himself plenty of clearance as he passes the other tow. Having come up to the pilothouse before breakfast, I have been here since we left the lock a few minutes after five, in ample time for the next event.

**90.** This is the next event. At 5:25 a.m., the Billy Joe Boling and the fifteen barges instantly lose a hundred per cent of their momentum and come to a sickening, shuddering, completely unexpected, and convulsive stop. This eleven-hundred-and-forty-five-foot vessel has not just been sliding in mud; it has run aground hard. The port wing wire has snapped, and, as we will learn soon enough, seven other wires have snapped, too. The port wing wire runs from the last barge in the port string to the Billy Joe Boling itself. Now, ghastly, that barge and the one in front of it begin to drift slowly away. Grain and corn excluded, half a million dollars' worth of barges are taking off on their own for New Orleans. Tom Armstrong appears in the pilothouse like a genie. It is, after all, five-thirty in the morning and time for him to relieve Mel and take over the hapless sticks. Simultaneously, Tom and Mel reach for the general alarm. Tom raises its red plastic cap. Mel throws the switch.

**91.** Every crewman is on the deck anyway, at the changing of the watch. The gap between the grounded vessel and the two loose barges widens. Fifteen feet. Twenty feet. There may be a chance to catch a line. Doug Gable, who has disappeared from the main deck, reappears with a bright-white brand-new line, a large eye at one end. Coils in one hand, eye in the other, he heaves the line, attempting to lasso a steel, sausage-shaped cavel on the barge. He has time only for the one throw. The line falls into the water. The barges drift farther away.

**92.** Mel, inspired, reverses the throttle of the port-side engine and gives it full power. The reversed wheel wash drives a No. 10 rapid upstream at the side of the Billy Joe and into the escaping barges. Slowly, magically, the runaway barges forget New Orleans, go back upstream, and return exactly to their original positions in the port string. Mel says, "Those barges, when they hit, looked rared up--you know, pushed up in the water. Anybody says they never ran aground on the Illinois River it's because they never ran the Illinois River."

93. In the space of a few minutes, Rick Walker, second mate, lays twenty feet of frayed and broken wing wire across a wire cutter and trims it back with a sledgehammer. He picks up the intact new end, curls four feet of it into a new eye, splices it, and leaves a foot of protruding tail. He lays the new eye over a cavel on the stern port-string barge. The additional wire has come off a winch like fishing line off a reel. Rick with steel cable can make loops like an angler. The winch tightens the new wing wire. Up the tow, Rick and others replace the three fore-and-aft wires and four breast wires that also broke. The port lead barge remains stucker than a postage stamp. Knocking keepers off pelican hooks with sledgehammers, deckhands detach the port lead barge so that Tom will be able to back up the rest of the tow and, with a lock line, yank the port lead barge free.

94. "There's one aground every day up here," Tom says. "It's not a deep river. If you can't back it off, you have to take the barges apart and dig it off. All it costs is time."

95. Mel, turning at the head of the stairs, has a parting word for me. He says, "When you write all this down, my name is Tom Armstrong."

96. Two hundred feet to the gallon.