

1

A Norfolk Interlude

Serving the Maritime Industry: 2003

On a surprisingly balmy day in late October 2003, the MV *Maersk Carolina* makes her way into port in Norfolk, Virginia.

The *Carolina* is 958 feet long and is rated to carry 50,698 tons (gross). She was built in Ulsan, South Korea, by Hyundai Heavy Industries Company, for Denmark's Maersk Sealand, and was launched on November 8, 1997. Originally christened the *Grete Maersk*, sailing under the Danish flag, she has recently been renamed and reflagged as a U.S. vessel. Maersk participates in the U.S. government's Maritime Security Program, which provides \$2.1 million per year in operational subsidies to each of the forty-seven vessels in the program, designed to ensure that a fleet of U.S.-flagged commercial vessels will be available to the United States in times of national emergency.¹ As a result, the *Carolina* now flies the U.S. flag, and is manned by a twenty-one-member American crew.

The huge ship—the length of three football fields, plus a few end zones—has a capacity of 4,300 “20-foot-equivalent units (TEUs).” This means that, with some careful space planning, she can carry roughly 2,000 containers that are 40 feet long, 8 feet wide, and 8½-feet high. Each container can hold up to 50 tons of “general cargo”—everything from textiles from India to floor tiles from the Mediterranean to frozen seafood. When the *Carolina* gets up to full speed, it can take half a mile of water to effect an emergency stop, going from full ahead to full astern. So she creeps, rather than cruises, into Norfolk.



The MV *Maersk Carolina* receives a timely nudge from a tugboat as she makes her way out of Port Elizabeth, New Jersey.

For most of the last few miles of her trip, she is piloted by a local harbor pilot, who has come aboard in the outer harbor to help guarantee a safe arrival at the Maersk docks. Two tugs stand at the ready as the *Carolina* nears those docks. On the bridge with the harbor pilot is Captain David E. Bell, making his tenth visit to Norfolk as master of the *Carolina*. Although the pilot is doing the hands-on “conning” in this final approach to the pier in his harbor, which he knows intimately—ordering slight adjustments in course and engine speed, communicating with the tugs by radio, and so on—the *Carolina* remains Bell’s legal responsibility. So, in an unobtrusive, collegial sort of way, not hovering, occasionally making an observation about the proceedings, Bell monitors the pilot’s every decision, ready to step in when necessary.

David Bell is a graduate of the United States Merchant Marine Academy at Kings Point, New York, class of '72. Bell grew up in Gamboa, a small town in the Canal Zone in Panama, where his father worked as a policeman. Throughout his childhood, he watched great ships of all stripes and colors inch their way through the canal. Bell originally aimed to join the navy, but after thinking hard about opportunities for service as a Kings Point graduate, and the relative salary of the navy versus the merchant marine, he began leaning toward the latter. On his second try, he was admitted to Kings Point.

His Sea Year—a critical component of the Kings Point education, which deploys Academy cadets on merchant vessels for the equivalent of a full academic year—put him on a sequence of four cargo ships and a tanker that took him to Japan, Korea, Okinawa, Guam, Hawaii, the U.S. West Coast, the east and west coasts of South America, Vietnam, and the Philippines.

Bell graduated into a tough shipping economy. The Vietnam War, which had stimulated an already booming maritime industry for the better part of a decade, was winding down. Bell wound up piloting a 65-foot fishing boat based in St. Petersburg, Florida, taking tourists out on day trips. He next worked briefly for Ingram Ocean Systems, which ran two integrated tug/barges, but left Ingram to fulfill his navy obligation.

This was not an unusual track. In return for their government-sponsored education and training, Kings Point graduates are expected to sail on their licenses on a merchant ship at least four months every year for a period of five years and complete two weeks of naval reserve duty each year, or serve active duty in the navy for five years. Alternatively, they can pursue shoreside maritime employment if that employment is approved by the U.S. Maritime Administration (MARAD), the agency that supervises Kings Point.

After his navy hitch, Bell took a job running a dinner-restaurant ship, which paid a decent wage but offered few long-term prospects. All the while, Bell yearned to get out on the deep water again. His chance came in January 1974, when he shipped out as third mate on the SS *Columbia*, a United States Steel ship that ran semifinished steel products from the East Coast to the West Coast through the Panama Canal. He upgraded to a second mate's license in June 1976, and then moved over to the tanker trade, where he spent the next twenty years carrying crude oil and occasionally a load of grain. He quickly earned

his chief mate's license and upgraded to master in 1978. But the industry was still suffering, and it wasn't until February 14, 1984, that he took command of his first ship: the *Rover*, a tanker operated by the Stamford, Connecticut-based OMI Corporation, which was part of the navy's Near Term Preposition Group on the Indian Ocean island of Diego Garcia. As he recalls, "There's nothing like going on your own ship for the first time, and you're the captain. There's nobody to call when you've got a problem. You're the guy they're calling. It was a little old rustbucket of a ship, for sure. But for me, it felt like the Starship *Enterprise*."²

Eventually, Bell and OMI parted company. When Bell heard that Maersk was reflagging four ships as part of the new Maritime Security Program, he sent in his résumé. He sailed as chief mate on the *Maersk Texas* for one trip, then as master for five years, and, in January 2003, took over as master of the *Carolina*—or, more accurately, as one of two masters of the *Carolina*. Like most deep-water merchant ships, the *Carolina* has two alternating crews; when one is on duty, the other is ashore. Each crew makes two round trips, for a total of ninety-eight days at sea, and then gets an equal amount of time off as the alternate crew takes over the *Carolina*.

Sailing a container ship, says Bell, is mostly routine. Once you've visited a port three or four times, there are no more surprises. Out on the high seas, you point the ship in the right direction, keep a watchful eye out for traffic, and carefully monitor the state of your crew and your ship. If you're lucky, nothing much happens.

On January 3, 2003, the alternate master of the *Carolina* got unlucky. On that day, his ship was on a six-day run from the Mediterranean to Halifax, laden with goods ranging from oranges to cotton, when it ran into a fierce North Atlantic winter storm on the southern tip of the Grand Banks, off Newfoundland. The *Carolina* took a vicious beating, the likes of which only those who have traversed the North Atlantic in winter can imagine. It lost something like 130 containers over the side and sustained heavy damage to its superstructure. Many of the remaining containers tumbled out of their orderly stacks, collapsing upon and crushing one another. When the *Carolina* limped into Halifax, onlookers were stunned at the destruction on deck. "She must have been hit by one hell of a wave," said one.³

Inevitably, the captain of the *Carolina* came in for criticism. "But in fact," Bell says soberly of his counterpart, "he probably *saved* this

ship, and its crew. No loss of life, and only one or two people injured.”

Also on the bridge of the *Carolina*, as she makes her careful way into Norfolk’s inner harbor, is Third Mate John Logan Bennett, who graduated from Kings Point only a few months earlier, as a member of the class of 2003.

By the time the *Carolina* is ready to close in on its appointed pier, yet another player has entered the picture. This is the docking pilot, who takes responsibility for the very last leg of the ship’s journey. Bennett stands at the ship’s throttle, awaiting the docking pilot’s commands. Captain Bell and the harbor pilot maintain a casual vigilance in the background.

“Dead slow ahead,” the docking pilot says, looking intently out the window at the slowly closing gap between ship and pier.

“Dead slow ahead,” repeats Bennett, adjusting the ship’s throttle, which causes a bell to sound both on the bridge and far below deck in the engine room.

And a few minutes later: “Full stop.”

“Full stop,” repeats Bennett.

Aided by the bow and the stern thrusters, the tugs are now doing most of the work, pushing on the starboard bow and stern, nudging the sixty-thousand-ton ship’s port side against the dock. There is an almost imperceptible impact—a tiny shudder that ripples across the giant ship—and the bridge signals “FWE” (finished with engine) to the engine room. This leg of the trip has ended without incident.

Logan Bennett—he rarely uses his given name—grew up in Charlotte, North Carolina. He played linebacker for a powerhouse football team in Charlotte, and planned to attend a large, football-oriented school. But his high school coach strongly encouraged him to apply to the Merchant Marine Academy. “If you work hard there,” he remembers his coach saying, “you’ll be set for life.” He had no particular yen to see the world; in fact, he had never been on an airplane before making a visit to Kings Point in his senior year of high school. Nor was there any maritime tradition in his family. (His father was an electrician, and his mother a data-entry clerk.) But he liked what he saw and decided to enroll.

After surviving the regimentation of his plebe year, he went to sea for his Sea Year on the MV *Sealand Integrity*, an Atlantic-class vessel (ACV) containership. En route from England to Algeciras, Spain, a fire broke out on deck. Bennett loaned his knife (standard gear for Academy cadets on Sea Year journeys) to a crew member who was



The MV *Jeppesen Maersk* approaches the MV *Maersk Carolina* while the *Carolina* is in transit between New Jersey and Norfolk, October 2003.

frantically trying to cut loose a burning tarpaulin. After retrieving his knife, Bennett manned a hose until the fire was safely out.

The *Integrity* later made stops in Germany, Italy, and Malta, in addition to Spain. It was a lot of world to see for a kid from Charlotte who had never been south of Daytona or west of Atlanta. He recalls that he was desperately homesick on his first trip across the Atlantic, on a ship with eighteen other men from all walks of life—except, perhaps, his own—but he decided to tough it out and see what would come next.

Football fell by the wayside, in part because Bennett decided he was a step too slow to play competitively, and in part because he was getting too small. (He lost thirty-five pounds under the Academy's demanding physical regimen.) He took academics very seriously, enrolling in the rigorous Ship's Officer program, which prepares cadets to sit for the deck license and also allows them to qualify as a Qualified Member of the Engineering Department (QMED). Depending on which scoring system is subscribed to, he graduated either number one or number two in his class at the Academy.

Maersk came interviewing at Kings Point, liked what they saw in Bennett, and offered him a third mate's berth—the standard starting point for a freshly minted Academy “deck” graduate. He went aboard the *Carolina* in the late summer and began his first forty-nine-day run, which took him from Newark to Norfolk into Charleston, across the Atlantic through the Straits of Gibraltar, and into the Mediterranean. From there, the ship traveled on to Gioia Tauro, a major Italian container trans-shipment port, through the Suez Canal in Egypt; down through the Red Sea to Jeddah, Saudi Arabia, and Salalah, Oman; then to Jawaharlal Nehru, India; and returned by way of Algeciras, Spain. “And from Algeciras,” he concludes in his recitation of the ship's itinerary, “we go to Halifax, and then back to Newark.”

While at sea, a third mate's life consists mainly of four-hour bridge watches, day and night. As third mate, Bennett's duties included the morning and evening eight to twelve watches. While in port, the third mate follows a hectic six-hours-on, six-hours-off schedule, in what amounts to a frantic group effort to unload and reload the ship. The days of the “girl in every port” are long over, Bennett says; there simply isn't time enough in ports today. Now, while docking, the third mate mans the throttle, makes sure that the quartermaster on the rudder control correctly executes steering commands, records times and positions, notes changes in the bridge's complement, and generally makes himself useful. Useful is an understatement in Bennett's case: Captain David Bell notes that he has seldom, if ever, been so impressed with a third mate.⁴

His most challenging moment so far, as a third mate? Bennett thinks for a minute and then responds. “Being in the Mediterranean, having the con [control of the ship's direction], going twenty-two knots, and having thirty little fishing boats all around you radioing to please turn left and not run over their nets. That's when I might call Captain Bell in his quarters and ask if he might possibly come up to the bridge and stand by.”⁵

Several miles to the west, Port Captain Jessica S. Mowrey is monitoring the *Carolina's* arrival in port. A 1997 graduate of the Academy, Mowrey is Maersk's “designated person ashore” (DPA) for the *Carolina* and her three sister ships: the *Georgia*, the *Missouri*, and the *Virginia*. As the DPA, Mowrey needs to be constantly aware of where her vessels are, and where they will be next. Should any problems arise,



A view from the *MV Maersk Carolina* as she prepares to dock in the port of Norfolk.

Mowrey—the primary on-shore liaison for the ships’ captains—tends to be the first to hear about it.

On most days, Mowrey arrives around eight a.m. at Maersk’s Norfolk headquarters in a one-story, brick-clad building that helps to anchor a nondescript suburban office park. The floor plan is mostly open. Rows of gray filing cabinets separate the Commercial Operations Division, where Mowrey sits, from the commercial engineers. The first thing she does is to go through e-mail and voice messages to check on the four vessels under her care. Often, these messages will define the course of her day by surfacing the on-board issues that Mowrey has to make her own. These can range from the commonplace (a captain needs more time in a port), to the unusual and potentially dangerous (a ship is heading directly toward some serious weather), to pretty much everything in between. When the more serious problems arise, Mowrey may find herself called in

at any time of the day or night. “It can be a twenty-four-hour job,”⁶ she says.

On this day, in addition to the *Carolina*'s entry into port, the captain of another vessel has called in to report a lost ten-ton anchor. Mowrey has been trading a flurry of e-mails with the captain and crew all morning, trying to figure out just how and why this happened. She is also trying to track down a new anchor of the correct weight and size (a fifty-thousand-dollar investment, even without the requisite shot of chain) and conclude how long it will take to get it installed on the ship. In the meantime, Mowrey has to work with the captain to figure out what the impacts of a lost anchor will be; for example, the ship may need additional tug escorts (at a cost of up to a thousand dollars each) in the next several ports that it will visit.

Mowrey is now in her third year of employment with Maersk Line. Upon graduating, she chose to go on active duty with the U.S. Marine Corps, in which she served for three and a half years. When her rotation was up, she started looking for jobs using the Kings Point online Alumni Job Opportunity Bulletin and came across an engineering opening at Maersk. Though the job wasn't even in her department—she was a “deckie” rather than an engine major—she decided to call the company and ask what was available. Soon after that, she found herself working in the personnel department, and several months later she made the transition to operations.

As Maersk's youngest port captain, Mowrey is still unsure of where her career path will lead. For the most part, she loves her job. Though she thinks that she would have enjoyed going to sea, she also appreciates having a “regular” lifestyle and enjoying the comforts of home. The size of her company, she points out, is a “huge advantage,” because it affords her lots of different paths to choose from as she continues in her career. In the near term, she plans to interview for admission into a Maersk management program, and she believes that she is a strong candidate for a position.

“And after that,” she says, “we'll see what comes next.”

The executive offices at the Maersk Line's Norfolk headquarters are across the building and down the hall from Mowrey's desk. One of these offices, well appointed, but not opulent, is occupied by Stephen Carmel, Kings Point, '79, who today is a senior vice president with Maersk. Carmel, who sailed for more than ten years after graduating,

came ashore in 1990 as a port captain with U.S. Marine Management, at the time a wholly owned subsidiary of Maersk.

Carmel grew up in a steel-mill town in rural Pennsylvania. Chafing at the confines of small-town life, he chose Kings Point because it would allow him to see the world, and also because it was a free college education. His primary goal upon graduating was to command a ship as soon as possible. He chose to join the Military Sealift Command (MSC), because this would allow him longer stints at sea and thus a faster advancement on his license. After spending five years with MSC and earning his master's license, Carmel moved to a position with Maritime Overseas. He sailed with them for five years, first as chief mate and then as master. He then came ashore with U.S. Marine Management, in a position similar to the one Jessica Mowrey now holds down the hall and across the way.

In 1997, U.S. Marine Management merged with Maersk Line. Since that time, Carmel has been responsible for all operating activities in Maersk's American-flag maritime division. He spends part of his time overseeing the daily routines of running a fleet of twenty-six container ships, and the rest of his day on new business development.

Today, he notes, company operations are running smoothly. (The exception is the anchor incident, but Carmel knows that Jessica Mowrey is bird-dogging that issue.) So Carmel begins his workday by meeting with a team of engineers he has assembled to investigate a parametric rolling incident that has been affecting some of Maersk's large container ships. This phenomenon involves a large roll angle generated in head/stern sea conditions with long-crested waves, which causes unpredictable and violent rolling. Parametric rolling has been experienced on ships for centuries, but its effect on modern container-ship designs has been unexpectedly significant.

The stakes are high, as the *Carolina's* near disaster off Newfoundland amply illustrated: 130 containers lost and many more destroyed. Carmel's team is working with weather experts and naval architects to understand exactly what happened in that episode, and to adapt operating procedures to prevent similar losses in the future.

In addition, Carmel has budgeted some time today to concentrate on a forward-looking strategic concept for an Afloat Forward Staging Base for the Department of Defense. This is a project that Carmel has been working on since the Afghanistan conflict, when Maersk was approached by the military and asked to design a new type of "sea

base,” a vessel on which to base its special forces. Carmel, working with a team at Maersk, has developed a plan to transform one of its S-class carriers—among the largest and fastest container ships in the world—into a helicopter carrier for assault troops. Carmel hopes to see a contract with the government in place within the next year. This would represent a lightning-fast pace in the world of government procurement, Carmel acknowledges. He readily admits, too, that there’s a lot of conceptual development yet to be done on the project.

The outsourcing of military functions to private operators has become much more common in the post–September 11, 2001, world. The conflicts in Afghanistan and Iraq, for example, drew heavily on the services of private ship operators, and not surprisingly, there is a lot of industry interest in this area. In fact, Carmel has been asked to present the Afloat Forward Staging Base concept in the following week at an expeditionary warfare conference in Panama City, Florida.

Of course, commercial maritime interface with the military is not new. It dates back at least to the days of the Phoenician traders, who from time to time outfitted their galleys with sails and rams at the behest of the military. The efforts of the Military Sealift Command are only the latest in this long tradition.

“But demand is continuing to rise,” Carmel concludes. “As a result, both the MSC and private operators are being called upon to help the military come up with a new model for modern warfare.”

Across town, at Camp Pendleton near Virginia Beach, another Kings Point graduate is similarly focused on the commercial/military interface. But Andrew M. Kallgren, Kings Point, ’89, is eyeing the challenge through the lens of the Military Sealift Command itself.

Kallgren grew up in Stamford, Connecticut, and chose the Merchant Marine Academy mainly as a result of his love for competitive sailing (of which there is a great deal at Kings Point). Like Steve Carmel, Kallgren lined up a job with Military Sealift Command months before graduating. Unlike Carmel, however, this choice wasn’t simply about a speedy ascent to the helm. Rather, on the advice of one of his mentors at Kings Point, Kallgren was placing a bet on the direction of his industry’s future.

Kallgren became concerned about the health of the maritime industry early on in his time at the Academy. In fact, he still recalls the

shock of hearing a professor at Kings Point give the entering plebes a particularly dismal forecast. “My first year,” he explains, “I was in one of the introductory courses, probably marine science, and there was an old captain teaching the course. He looked out across my class of twenty-five or thirty, and he told us quite frankly that he would be surprised if *any* of us were able to sail on our licenses when we graduated, or make a career in the merchant marine, and that we were going down the wrong path. It was kind of disappointing at the time!”⁷

But the maritime industry is famously cyclical, and by the time Kallgren graduated in 1989, the old captain’s prediction had proven wrong: there were once again maritime jobs to be had. Kallgren, however, had gotten a vicarious look at the hard times, and still believed that Military Sealift Command represented the best bet for steady maritime employment.

Kallgren sailed with the MSC for the next nine years: first on a “roll on, roll off” (RO/RO) ship, the USNS *Mercury*, which carried ammunition and military equipment all over the world, and subsequently on a cable ship, the USNS *Neptune*, pulling up and extracting data from government cables that had been laid on the ocean floor. Later in his MSC experience, Kallgren witnessed a symbolic milestone for the military while serving on the USNS *Kilauea*. That ship, he explains, was one of the first ammunition vessels that the navy converted to civilian operation. It was an experiment in outsourcing that proved to be a remarkable success. The civilian crew was tasked with everything that the navy crew had done, including some classified tasks, and was able to do it with a fraction of the manpower and cost. In addition, the navy found that a civilian crew offered them more continuity and reduced their training responsibilities. The crew members were somewhat older, better trained, and further along in their careers. Unlike the navy crew, they weren’t frequently rotated ashore to new positions. These were professional seamen, and they ran a professional ship.

Today, this model is being extended to ever-higher levels within the navy. In fact, the USS *Coronado*, one of the navy’s command ships, recently sailed under a mixed civilian/military crew. This was the first time, Kallgren explains, that a civilian crew was entrusted with the care of a three-star admiral, who was directing war-fighting from the vessel, and the experiment was carefully scrutinized by military and private-sector observers alike.

Kallgren married and came ashore in 1998, taking a post with MSC's training division. Soon after, he was transferred to personnel and put in charge of placement for the deck positions on MSC ships, and then promoted to head of all marine placement for MSC ships. In this capacity, Kallgren has experienced firsthand the growing need for civilian support of the military. In fact, he admits, he often finds himself scrambling to meet this need.

On this particular fall day, for example, he's trying to man the USNS *Supply*, which is gearing up for deployment. *Supply* is one of the navy's larger auxiliary ships, and one of the first of its class to be transferred to MSC operation. As such, there's a lot of pressure on Kallgren to get it up to full capability as soon as possible. There are also more subtle pressures. "As far as I can tell," he explains, "a lot of navy personnel aren't too happy that we're getting this ship. The fleet commanders want to challenge the ship. They want to make sure it has the same capability it had before, at least as far as the logistics elements. Can it run so many rigs at one time, and flight quarters simultaneously? Can it keep up the pace, as far as fuel, ammunition, food for supplying the carrier battle group? It's a very conspicuous challenge."⁸

The *Supply* has a crew complement of 177 civilians, but on this particular day there are only about 140 on board. In other words, Kallgren is down about 30 bodies from a full crew. And just to complicate things, many of the crew members who are on board, Kallgren admits, are "pretty green." These are not ideal circumstances under which to be conspicuous.

Today, he's using carrots, sticks, and all the other tools at his disposal to solve the *Supply*'s staffing shortfall. Several recruiters in his department are combing the United States (and also looking abroad) to find mariners with the necessary skills who might be interested in signing on. Meanwhile, Kallgren is reviewing the minimum staffing needs of several other ships under his control, to see if he can get away with pulling people from other assignments to work on the *Supply*. Compounding his challenge is the fact that the *Supply* is a gas turbine-powered ship. This narrows the engineer pool dramatically, since most U.S. mariners today are trained to operate diesel ships.

Kallgren is also what's known as the proposing official for disciplinary matters concerning MSC personnel afloat. As such, on any given morning, he's likely to find one or two cases on his desk that

require his attention. These range from minor alcohol infractions to more serious charges.

Today, for example, he's faced with an unusual situation. One of his captains has contacted the office to report an apparently unbalanced crew member, who in the course of performing routine navigational chores has dramatically misplotted the position of the ship. (The vessel was operating off the coast of California; the crew member somehow came up with a position somewhere off the Philippines, and it appears to have been something other than an honest mistake.) After some discussion, Kallgren works out an arrangement whereby the ship will detour to a nearby port and drop the sailor off for psychiatric evaluation.

One of the most difficult parts of Kallgren's job is coordinating time for MSC personnel to take training courses ashore. MSC uses navy schools for refresher and upgrading courses, but often the MSC manning complement is so tight that crew members can't be spared to take on-shore training courses. Traditionally, the navy has dealt with this problem by carrying larger crews with redundant skill sets, thereby freeing up individuals for on-shore rotations. It's a staffing luxury that, for better or worse, is not available to MSC personnel, and Kallgren has to squeeze in training time when and wherever possible.

He confidently expects the number of mariners employed by MSC to rise dramatically over the next several years: from roughly four-thousand to more than six thousand personnel. "Am I confident that those higher numbers will significantly ease the manning situation?" he asks rhetorically. "Well, not if demand continues to grow apace."

Not that scheduling navy training is easy, of course. Across town, at the Center for Naval Engineering on the Norfolk Naval Base, Lieutenant Commander John C. Hazlett, Kings Point, '96, shakes his head and smiles a little ruefully as he describes his current task: revising and coordinating the training needs of the thirty-three thousand enlisted engineering sailors in the Navy.

Unmanageable? Impossible? Well, *yes*, at least under current circumstances. Throughout its history, the navy has struggled against long odds to make sure that its sailors have the correct training for the jobs they are asked to do. Yes, the redundancy pointed to by Kallgren helps somewhat. At the same time, however, the rapid rotations that characterize service in the navy today greatly complicate the training

challenge. In theory, sailors have been sent to different schools to learn specific tasks before being assigned to certain jobs. In practice, sailors were often overtrained in one area, even while they lacked crucial skills in others. Or they didn't get a chance to practice their new skills soon enough, which in some cases meant a round of refresher training.

These realities have led in turn to a navy tradition of extensive on-board training. This approach assures that the sailors have job-specific skills, but it also tends to be highly inefficient. If every task that is being performed is also being taught, the ship must carry well over its necessary complement. On-board training also contributes to the seeming overpopulation of navy ship bridges: both students and teachers are at work.

In response, Hazlett and his group are engaged in a truly radical experiment. They are attempting to design a computer model that will help deliver training to the individual sailor—where it's needed, when it's needed—and eliminate costly redundancies.

Hazlett, who graduated from Kings Point in 1996, was always interested in a career on the water, though his first goal was Annapolis, rather than Kings Point. Growing up in Lorain, Ohio, a small town just west of Cleveland on Lake Erie, Hazlett surveyed the huge ore freighters that plied the Great Lakes, day in and day out, during the seasons when the lakes were navigable. Some days he dreamed of sailing these great freighters; other days he leaned toward active duty in the navy. He applied to Annapolis during his last year of high school but was not admitted, and instead attended community college for a year. Then he heard about Kings Point from a recent graduate who had attended his high school. He applied, was accepted, and decided to attend, still aiming for a navy career after graduation.

During his Sea Year, however, his perspective shifted. Hazlett was surprised by how much he enjoyed the merchant marine, and decided to sail on his license for a while after graduating. In the summer of 1996, therefore, he took a job with the Andrie Shipping Company, hauling asphalt on tugboat-propelled barges on the Great Lakes. He had realized his childhood ambition, but it was not all he had hoped for (he gently describes the asphalt business as a “less than desirable climate”), and he moved back to New York to take a first mate's position with New York Fast Ferry, a high-speed commuter ferry operating between Staten Island and midtown Manhattan. This company folded in 1997, and Hazlett found himself again looking for employment.

At this point, his career took yet another interesting turn. He heard

about an opening in the continuing education program at Kings Point, and decided to apply. Christopher J. McMahon, Kings Point, '77, had been hired in 1994 as director of the Academy's Global Maritime and Transportation School (GMATS). As part of an effort to reinvent that program, McMahon hired Hazlett in 1998 to head up the nautical science and marine transportation department. Hazlett describes what happened next to the larger program as a "meteoric rise"; under McMahon's leadership, GMATS went from a staff of seven people (and cash on hand of about three hundred dollars) to a highly profitable program with a staff of more than thirty people by December 2002. In part this was due to revised training regulations promulgated by the International Maritime Organization, a UN offshoot, which mandated new or refresher courses for a large number of merchant seamen. But it also reflected the entrepreneurial spirit of the program's leaders.⁹

In 2002, Hazlett left GMATS to take up his current job at the navy's Center for Naval Engineering, after he had worked in curriculum development at Kings Point. Hazlett is primarily tasked with working on the navy's Five Vector System, a new interactive computer model that will eventually track the certifications and qualifications of every navy sailor. The ultimate goal is to give sailors the ability to "detail" themselves—that is, to give them the opportunity to pick their own assignments by showing them what positions are available that match their qualifications, and/or what training they will need to complete to qualify for specific positions. To this end, Hazlett's group is capturing every single task that a naval engineer completes, and classifying these by skill level. (Similar teams, meanwhile, are also working on the Five Vector project for deck and other divisions.)

The end result will be a system that will allow sailors to be more proactive in defining their own careers. It will also provide the navy with significant savings—no small concern in a time of smaller defense budgets and larger defense responsibilities. The navy will no longer be training sailors in the same skills multiple times. Skill retention is expected to be greater, as sailors learn skills that they will actually be using in their next position. Although only three rates are currently functional, Hazlett expects the system to be fully operational in two years.

"In the meantime," he says, "we have our work cut out for us."

One sailor who might have benefited from the Five Vector model is Sharon Thorpe McClnay, a member of the Kings Point class of '99. McClnay grew up in Huntington, a small town in central Pennsylvania located not far from Penn State University. She had little experience on the water as a child, but in choosing to attend Kings Point she continued a long tradition of seafaring in her family; among others, her grandfather was a Dutch merchant mariner (and later a member of the U.S. Navy), and her uncle sailed in the navy. Partly because of these family ties, McClnay chose to go active duty in the navy after graduating from Kings Point with an engineering degree.

McClnay's logical first step in the navy would have been to attend the navy's Surface Warfare Officer School (SWOS). But because of Kings Point's relatively late mid-June graduation date, SWOS had already filled its spring class, and McClnay had to wait for the November class. In the meantime, she was detailed to the Military Sealift Command as a damage-control instructor with the Afloat Training Team. In this capacity, McClnay taught firefighting, antiterrorism, and chemical, biological, and radiological defense courses onboard MSC ships. She then completed the SWOS program, as well as an advanced gas turbine school and a communications officer school. After finishing up this third round of training, she got her first seagoing assignment: a tour of duty aboard the destroyer USS *Stump* as an auxiliaries officer, supervising all of the engineering equipment not associated with main propulsion, including potable water, steering gear, hydraulics, sewage, and steam.

McClnay became engaged in 2002, after several years aboard the *Stump*. She says today that she would have liked to remain on active duty, but she and her fiancé encountered difficulties when consulting with navy officials about possible colocation. The navy assignment officers could guarantee only that they would try to station the two in the same place every other tour. The prospect of eighteen-month tours apart—or, in the worst case, more than that—held little appeal for the young couple, and McClnay decided to leave the navy.

McClnay sailed briefly with the National Oceanic and Atmospheric Administration (NOAA). She then landed a shoreside position as a potable-water applications engineer with Newport News Shipbuilding, a subsidiary of Northrup Grumman, in Newport News, Virginia. The job was an instant fit, thanks to McClnay's experience with potable water on the *Stump*.

In one sense, water is the mortal enemy of a ship. At the same time, it is a ship's lifeblood. Water not only keeps mariners clean, healthy, and hydrated, it also plays a vital role in the basic operating systems of most ships. As a result of her time on the *Stump*, McClnay understood better than most the importance of a reliable potable water system aboard ship.

I have a real appreciation for water usage on board. Basically, the distilling plants are designed to meet the criteria of thirty gallons of water per person, per day. If you waste any of that water, or lose any of that water, there's no buffer built in. There's no way to recover it. There were too many nights on the *Stump* when I had to get up and go walk the fresh-water system to find out where the leak was, because we were losing too much water. And sometimes it's not as simple as a leak! Sometimes people are just using way too much water. It's no fun; you want to choke them, actually, because they're not the ones getting up in the middle of the night walking the system. I would like to avoid that for future sailors.¹⁰

Today, McClnay is working on the potable water systems for two new navy aircraft carriers, the Nimitz-class *George H. W. Bush* and an even newer vessel, a yet-to-be-named CVN21-class carrier. McClnay's primary task is preparing the specifications for the equipment that the vessels will need. She passes these specs on to the designers she works with; they then figure out how to run the pipes and integrate the potable water system equipment into the ship's multiple operating systems. These designs are passed on to the naval architects, who integrate them into the overall ship design, taking into account weight, center of gravity, and other considerations.

The *George H. W. Bush* is the tenth Nimitz-class aircraft carrier, scheduled for completion in 2008. As such, its design is almost complete—in fact, some component parts are in the prefabrication stage—so McClnay is mainly adapting new technologies into an existing carrier “package.” The CVN21 class, by contrast, is still in the concept stage. It will be a substantially different design, and therefore gives McClnay opportunities to work on early-stage conceptual design.

McClnay stresses that she enjoys her work, continues to learn new and interesting things at Newport News, and is pleased to be able to put the engineering skills that she learned at the Academy to good use. At the same time, she admits, she finds her thoughts drifting seaward.

She and her fiancé are planning a move to Bremerton, Washington, in the near future—he’s being transferred to the carrier USS *Carl Vincent*—and she’s starting to look for merchant marine opportunities in that area.

“I really enjoy being at sea,” she explains. “If my fiancé is going to be on deployment, I might as well look for a ship.”¹¹

Kings Point graduates are not found only on or near the water. In the center of Norfolk’s compact financial district, the admiralty law firm of Davey & Brogan, named in part for partner and Kings Point graduate Patrick Brogan, ’79, makes its home in a formidable nineteenth-century three-story stone building that also houses the city’s venerable Virginia Club, a formerly all-male eating club that not so long ago admitted its first female members. Across the street, appropriately enough, is the Norfolk World Trade Center and Customs House.

Patrick Brogan grew up in McLean, Virginia, and credits his seafaring ways to his mother’s side of the family. Her father sailed on merchant ships in World War I, and her brother attended the Pennsylvania State Nautical School (which closed its doors in 1947), and later became a rear admiral in the naval reserve. Brogan spent a year at Virginia Tech, but—as one of twelve children—eventually found the tuition bills prohibitive. With encouragement from a high school classmate who had chosen to attend Kings Point, he started over at Kings Point.

Brogan began as a dual-degree candidate (majoring in both engineering and deck-related studies), but eventually narrowed his focus to engineering alone. Soon after he graduated, he joined the Marine Engineers Beneficial Association (MEBA, a tradition-rich maritime union, founded in 1875) as a third assistant engineer. The first time he walked into the union hall in Norfolk, he recalls, there were two jobs on the board that he could have taken: a permanent position on a tanker that was sailing an East Coast route, or a temporary job on a break-bulk ship heading to the Mediterranean and North Africa.

He opted for break-bulk, and adventure. (Break-bulk is the way most cargo was shipped before the advent of containerization—that is, on pallets, in bags or crates, or loose in tanks. Break-bulk ships spend more time in ports due to greatly extended loading and unloading times, and their sailors tend to see more of the shoreside world.)

Brogan sailed with MEBA for the next three years, but by the end of this time, shipping jobs were becoming scarce, and he decided to change direction. He took the LSATs, did well, and was admitted to law school at William and Mary in Williamsburg, Virginia. Over the next three years, he took every admiralty law course that the school offered.

Brogan had already fulfilled his obligation to serve for six years in the naval reserve. After graduating from law school, however, he decided to accept an offer from the navy's Judge Advocate General Corps (JAG) instead of an offer from a private admiralty law firm in Norfolk. Brogan worked first as a JAG litigator, defending navy personnel, and then as a staff judge advocate. In the latter position, he worked on a legal advisory team to the commander in chief of the Atlantic Fleet, offering counsel on day-to-day regulation issues, and also overseeing investigations into collisions and other accidents.

In 1990, Brogan took a phone call from Phil Davey, a Norfolk acquaintance who had decided to launch his own admiralty law firm. Davey was familiar with Brogan's reputation and credentials, and asked him to join him in starting the new firm. The offer came at a propitious time, and Brogan decided to accept.

The firm has grown steadily since then. Currently, it serves as port representative to six of the thirteen international protection and indemnity clubs (simply put, mutual insurance companies that insure many international vessels), and these relationships guarantee the firm a steady stream of work. (Because of the large amounts of capital involved, no ships sail without marine insurance coverage.) In addition, Davey & Brogan does a good deal of tugboat work (some of the most collision-prone vessels, simply because of the nature of their work), and also represents terminal operators and other shore-based litigants.

For the most part, Brogan loves his work—which, as he explains, is a good thing. "Admiralty law," Brogan says, "is a specialty that you shouldn't undertake unless it's in your blood and it's something you like to do. It's not as lucrative as the high-profile areas of the law. We do it because we like it. We do it because we grew up on the water."¹²

Like his colleagues, Brogan works on several cases simultaneously. This morning, he's preparing to take a deposition from an expert witness in a case in Baltimore. The case involves a tug that was involved in a collision just outside the Chesapeake & Delaware Canal, the man-made waterway that connects the Delaware River with the Ches-

peake Bay and the Port of Baltimore. One ship, it seems, was traveling south from the canal to the bay when it ran into a two-mile stretch of heavy fog. Visibility suddenly fell to no more than 150 feet. The south-bound ship, sailing more or less blind, barely missed the tugboat that Brogan is now representing but collided with the barge that Brogan's tug was towing, and then hit another tugboat behind it. The claimant's witness will be attempting to prove that Brogan's tug was at fault; Brogan will be trying to find the holes in his argument. Meanwhile, he will also be putting time into another case in the eastern district of Virginia, for which settlement talks are already under way.

The number of containers passing through the Hampton Roads/Norfolk/Virginia Beach area has risen by as much as 15 percent a year in the last several years. Unlike other maritime-related professions in the region, though, maritime attorneys are not necessarily reaping the benefits of this growth. This is partly because individual vessel capacity has risen along with container traffic, so Norfolk isn't necessarily seeing more ships enter its harbor. Technology continues to improve as well, improving safety conditions and reducing collision-related incidents.

But Brogan doesn't foresee a significant reduction in his caseload, either. "As long as there are ships in Norfolk," he says, "there will be disagreements and accidents. And as long as that's true, there will be a need for admiralty lawyers."

A steady rise in container traffic does mean more business for some parts of the maritime industry in the Norfolk area. One of those areas is the terminal side of the business: the companies that get the containers to and from the docks.

For instance: Virginia International Terminals, a port complex that consists of three different ports in the Norfolk area and one inland truck/rail terminal in Front Royal, has been enjoying a steady rise in demand for its services. Vance C. Griffin, Kings Point, '84, is currently serving as operations supervisor at Portsmouth Marine Terminal, one of those three ports. He estimates that the number of containers processed through his terminal has risen by as much as several hundred *per day* over the past year.

Griffin grew up in New Bern, North Carolina, and first heard about Kings Point through a friend who had attended the Academy and couldn't say enough good things about the experience. Griffin

knew very little about the maritime industry, but he was interested in a military career and liked the option of pursuing active duty after graduation. His Kings Point experience confirmed this preference and added a new dimension: Griffin now hoped to use his knowledge of shipping in the military. After graduating in 1984, he joined the army and reported to Fort Eustis, a Transportation Corps bastion in Newport News, to complete basic training. He followed this up with a second course in equipment maintenance, and then joined the 368th Transportation Company, a stevedoring and longshoremen operation. (Simply put, stevedores supervise cargo-handling tasks on the docks, loading and unloading ships and containers, and in some cases, maintaining and repairing containers. Longshoremen work the cargo under the supervision of the stevedores.) Thanks to his Kings Point experience, which had included a port-operations internship, Griffin found the stevedoring environment a familiar one.

Four years into his army service, however, Griffin felt he needed to reevaluate his career path. He was still enjoying his work and had been put on the army's promotion list, but now he had a wife and child to support. He heard of an opening at Virginia International Terminals (VIT), sent a resume in, and was offered the position. Two months later, he reported for work at VIT.

Griffin moved around among VIT's three local marine terminals, working for a year at the Newport News Terminal, and for another four years overseeing rail operations at the Norfolk Terminal. Then, in 1993, he was promoted to operations supervisor at the Portsmouth Terminal, on the Portsmouth side of the Midtown Tunnel that connects Norfolk and Portsmouth.

From his office in a well-groomed commercial building, which on this October day is in the midst of a noisy renovation, Griffin oversees the daily operations of his terminal. VIT's personnel don't do any stevedoring themselves. Instead, Griffin (and his counterparts at the other two marine terminals) works closely with several local stevedoring companies—for example, leasing equipment to them and providing them with operators for specialized equipment owned by VIT. Griffin also oversees the daily traffic of trucks in and out of the terminal, the “stuffing” and “stripping” (loading and emptying) of containers at the Portsmouth Marine Terminal warehouses, and the coordination of heavy lifts (that is, of any equipment too large or too heavy to be loaded into containers, and needing special gear and handling).

On this October day, Griffin is overseeing a series of heavy lifts of large transformers, each weighing between 287,000 and 398,000 pounds. With his orange hard hat and vest at the ready, he talks on the phone with representatives of the two railroads who will be receiving the transformers later in the day. He has already been down to the terminal this morning, coordinating with the three heavy-lift crane vendors who are working the vessel that has brought in the transformers, and most likely he will make his way down to the docks again before the day is out. The most important part of his job, he explains, is keeping in constant communication with the many players:

“There’s a lot of communication involved. A large part of my job is keeping things coordinated and ensuring that we provide the best service. That’s what we’re here for. We don’t sell a product, a widget, or an automobile. We sell service. That’s what we want to do the best. We want our customers to conclude that it’s the best quality service that they could possibly get anywhere, across the East Coast ports. And I think we do a pretty good job at that.”¹³

Another crucial element of Griffin’s job is keeping his container yard organized, up-to-date, and flowing. Portsmouth is one of the smaller terminals in the area—two hundred acres, in contrast to Norfolk’s eight hundred-plus—and this means that the Portsmouth operators need to use their every available inch efficiently. They also need to make sure that every piece of machinery can be relied upon. If just one component in the complex logistical chain goes down, Griffin explains, backups and turnaround time will increase rapidly—and he’ll have a good view out his office window of a long line of unhappy truckers.

One final wrinkle in the job is that it’s impossible to plan precisely for the week ahead—or even the next day. He is continually adjusting and readjusting, making sure that whatever container traffic comes his way is moved along as quickly and efficiently as possible.

“So, no,” he admits, “I almost never know exactly what’s coming at us. On the other hand, I’ve been around long enough to be able to make a pretty good guess.”

At the other end of the Midtown Tunnel, and at the end of an industrial cul-de-sac, is the one-story brick building that serves as home to Cooper/T. Smith Stevedoring, one of the largest stevedoring companies in the Norfolk area. And in one of the corner offices of this building sits

the company's senior vice president, Patrick C. Hall, a member of the Kings Point class of '71.

Hall, who grew up in southeast Nebraska, dreamed of becoming a fighter pilot. That dream seemed within his grasp when he was recruited to play football at the Naval Academy. As it turned out, however, Annapolis had too many linebackers that year and asked Hall to go to a naval prep school—and play football—for one year, and then reapply. Though he was almost certain to be admitted after that year if all went well, Hall began wondering what would happen if he were injured on the football field. Would he lose his spot, and his shot at flying?

So Hall turned down prep school and instead attended Rockhurst College in Kansas City for one year. During that year, he applied to the Merchant Marine Academy, was accepted, and enrolled. By this time Hall had quite a bad case of wanderlust, which his subsequent Sea Year experiences at Kings Point only began to satisfy. And, he told himself, he would *still* have the option of applying to flight school after graduating.

But he was destined for disappointment, at least in the short term. Toward the end of his Kings Point years, he took the navy flight physical and failed the eye exam. Frustrated, he toyed briefly with the idea of enrolling in the Marine Corps, but finally decided that because he had enjoyed what he had seen of the civilian maritime world, he would choose to sail, and enrolled in the naval reserve.

He graduated from Kings Point at a difficult time for the commercial industry—in 1971, the year of his graduation, the Masters, Mates, and Pilots (MMP) union temporarily closed its books to new members, and he considered himself lucky to land a job working as a superintendent trainee for McGrath Stevedoring on the Brooklyn waterfront. Only months after his arrival, though, the International Longshoremen's Association (ILA) called a strike over stalled contract negotiations.

The strike turned out to be long and disastrous. No cargo was moved except by management acting as longshoremen; and it wasn't unusual for a ship to sit in port for three weeks to a month, waiting for its turn to unload. As a member of management, Hall himself worked the ships for more than two months, loading and unloading ships. When asked today to reflect on that time, he chuckles. "When I explain to people what I do," he says, "they generally say, 'Oh, you

mean like *On the Waterfront*? And you know, when I first got to those docks in Brooklyn, it was a lot like that.”¹⁴

From Brooklyn, Hall moved on to a brief stint in Norfolk, and then to Houston as a ship superintendent. Houston at that time was booming, and Hall found himself working fifteen-hour days, seven days a week. After sustaining this grueling schedule for as long as he could, he decided to go back to sea, landing a position as a chief mate/relief captain on a Zapata Petroleum supply boat, plying the harbor of Sfax, Tunisia.

In late 1973, Hall found himself back ashore and looking for work near Hampton Roads. His wife had chosen the area as a place for the family to settle down. Hall began working the phones in search for a shoreside job, a task made more difficult by the recession that was then taking hold across the U.S. economy. Finally, at ten p.m. on New Year’s Eve, he got an interview with Nacirema, a stevedoring company, and was offered a position stuffing containers for the navy. After only two weeks, the company called on him for another task.

I got a phone call from the vice president, a Captain Chambers, who had sailed in World War II. He called me in, and said, “I understand from your background you know something about rubber.” I said, “Well, I worked some rubber in Brooklyn.” He said, “Good. We’ve got a new account coming in. It’s Central Gulf Line. They’ve got this new concept called LASH ships—Lighter Aboard Ship. The first ship is due the day after tomorrow. I want you down there to work it.” I had no idea what he was talking about.

We went to work in late January of ’74, and the first ship had fifteen thousand tons of baled and crated rubber on it, and nobody had the slightest idea what to do with it. Over the next two years, we managed to set up a system, and work it through, and it became very, very efficient.¹⁵

Hall’s success in the unlikely realm of bulk rubber earned him a position as operations manager at Portsmouth Marine Terminal, where he worked for almost a year. Then, in 1976, Nacirema lost the Central Gulf account, and a new company called Cooper Stevedoring came into Norfolk to take over the account. They knew they needed some expertise on the ground in Norfolk, and in June 1976, David Cooper called up Hall and offered him a job running Cooper Stevedoring’s Norfolk operations.

Hall, then just twenty-eight years old, accepted the position. He soon found out that the job description included not just Norfolk, but all of the company's East Coast operations. In the ensuing years, Hall helped Cooper Stevedoring (and later Cooper/T. Smith, after the company's 1983 merger with T. Smith & Sons) expand into Baltimore, Wilmington, Moorhead City, Charleston, Savannah, Jacksonville, and Brunswick.

Today, as senior vice president, Hall keeps a watchful eye on daily operations, helping his staffers figure out how many longshoremen to hire for the next day's work, or how to unload noncontainerized cargo in and around a series of rain delays. (Plywood doesn't like to get rained on.) At the same time, he also worries about new strategic directions for the company. For example, he is currently developing far-ranging concepts aimed at relieving the growing logjams in the maritime industry, as major ports on both the east and west coasts get increasingly crowded. Meanwhile, highway transportation is also feeling the squeeze, especially on the East Coast's Interstate 95, and more particularly in the Northeast Corridor. One project that Hall is working on—about which he'll say a little, but not a whole lot— involves moving construction debris by barge from the overcrowded Northeast through an intercoastal shipping corridor to landfills in the Southeast.

"So that's what my job tends to look like," Hall concludes. "I keep one eye on daily operations, and another eye on what I hope turns out to be the horizon."

The ten individuals profiled in the preceding pages share several important traits. First, they are all graduates of the United States Merchant Marine Academy at Kings Point, New York, the subject of this history.

Second, they work in (or, in the case of the crew of the *Maersk Carolina*, sail large ships into) the Hampton Roads area of Virginia, which includes Norfolk, Newport News, Portsmouth, Virginia Beach, and Hampton Roads proper.

Third, they have chosen to make their careers in or around the maritime industry, broadly defined.

These ten individuals, chosen from among the roughly three hundred Kings Point graduates working in the Norfolk area—of whom something like two-thirds work on, near, or around the water—

illustrate the wide range of maritime careers (military and commercial) for which Kings Point prepares its graduates.

Our illustration, however, only begins to show the true reach of the Merchant Marine Academy, as embodied by its graduates. More than 95 percent of the goods shipped into the United States arrive on ships bigger and smaller than the *Maersk Carolina*, through ports bigger and smaller than Norfolk. The *Carolina* is one of 237 (and rising) privately owned U.S. vessels of a thousand gross tons or more.¹⁶ (The government owns another 179, and U.S. ownership of foreign-flagged vessels expands the definition of the merchant fleet enormously.) Norfolk, for its part, is only one of twenty-one U.S. ports that process more than 100,000 TEUs over the course of a year. (Norfolk itself processed 1,093,000 TEUs in 2003.¹⁷)

The presence of a large navy base in Norfolk, and the presence of so many Kings Pointers in the navy, somewhat swells the ranks of Academy graduates in the Hampton Roads area. But Kings Pointers can be found in the maritime infrastructure of all major U.S. ports, across the U.S. fleet, and in all branches of the armed forces. In a sense, therefore, our ten subjects stand in for literally thousands of other Kings Pointers, in ports around the country and on ships around the world, whose stories of their place in the maritime infrastructure are equally compelling.

In this way Kings Point has a daily and profound effect on the maritime, and by extension, on the national economy. Water transportation is the lowest-cost form of transportation, and it is vital to national economic health. But like the industry it serves, Kings Point has struggled against great odds. It has reinvented itself many times. It has worked hard to maintain the support of a public that sometimes forgets the “fourth arm of defense,” and sometimes overlooks the fact that almost all of what America imports and exports travels by ship.

This is the saga of the U.S. Merchant Marine Academy at Kings Point. Founded as the U.S. Merchant Marine Cadet Corps in the late 1930s, the Academy has since trained more than twenty thousand mariners, and provided more commissioned officers for the naval reserve program than any institution other than the naval academy.

It is a story that could begin at one of any number of junctures in history. We will begin with a young maritime nation struggling to escape from the influence of an older and far more powerful maritime nation.

