

Captain Eric Neilsen

Meet Captain Eric Neilsen

I'm Captain Eric Neilsen. I'm president of Association of Maryland Pilots, and we are an association of sixty men and women who bring ships up and down the Chesapeake Bay. I knew early on in my life that I wanted to go into maritime industry because my grandfather went to sea as a young man and eventually came ashore, and then my father was also in the maritime industry. So I knew that I wanted to go into this direction, and the clearest avenue to me was to go to the United States Merchant Marine Academy. I was fortunate enough to be nominated and given an appointment and went there. After the four years program was over I got my Bachelor of Science degree and my third mate's license issued by the United States Coast Guard.

Explain what you do. Talk about an average day at work for you.

We board ships with these launches behind me just off shore of the mouth of the Chesapeake Bay, climb up a thirty foot rope ladder and board the main deck of the ship, climb up to the bridge of the ship (which is usually another ten stories) and assume navigational responsibility for bringing the ship from the mouth of Chesapeake Bay up to the Port of Baltimore.

A good analogy to explain the difference between a ship's captain and a pilot is that almost all the pilots were ships' captains before, and understand that process. That's more like a general practitioner in the medical field. Then a pilot becomes a specialist in just this particular port. They learn specialized skills, as far as ship handling in narrow channels, meeting ships in narrow channels, how ships handled differently in shallow water (which is always the case here) and maneuvering ships in to port.

To be a pilot, you have to have memorized every nuance and details of the Chesapeake Bay and everything that you can't see under water. When you're handling a ship in the narrow channels and something goes wrong and you need to exit the channel, there is no time to refer to the chart so see if there's actually enough water outside the channel. You need to know that by memory. You need to have a very detailed knowledge of everything that can be seen and everything that isn't able to be seen under the water, and it also resides in your mind. So when things don't go well, you can take action immediately.

What personality traits or interests can be a good match for this career?

People skills are vital for pilots because we go on board foreign ships. It's probably the first time they been to Maryland, perhaps the first time in the United States, certainly the first time they met me, and they must have complete and utter confidence in my skills. I have to take over the navigation and they have to virtually be blindly supportive of my decisions and you can only achieve that by handling them in an appropriate matter. They

need to be comfortable. You need to somehow converse with them and interact with them, even though English is certainly not their first language.

What parts of your education do you use most often in this career?

In our line of work, we use math everyday for navigating and for determining how close we're going to be to other ships, to lighthouses, to make sure we're in the right path, we're in the deepest water of the Chesapeake Bay. It's all based on angles and distances, time run, and matter such as that.

What has been the career track that's gotten you from your first job to where you are now? What special degrees or licenses did you need to get along the way?

I sailed on chemical tankers and worked my way up from third mate to second mate to chief mate and finally to master, and at that point I was qualified to apply to the State of Maryland to become a pilot.

If the State of Maryland selects you, you enter into a five-year training program to learn the skills of being a pilot. The first two years of that program, you ride with senior pilots to understand how ships handle differently in shallow water and in narrow channels.

You also must draw from memory each of the ten Coast Guard charts that are used to go up and down the Chesapeake Bay. The Coast Guard proctors that exam and you're given a blank sheet of paper with a sketch of the outline of the shore and you have to insert all the buoys, all the soundings, all the depth contours, all the ace navigations, all the range lights, everything, to actually replicate a published nautical chart. So you're learning that knowledge-base part of the job, as well as the actual skills to be a pilot.

After two years of riding with senior pilots and drawing the charts, you then are eligible to work on ships of lesser draft and improve your skills at that point. So for one year you're working on light draft ships, a year after that (if you're fortunate) it would be slightly deeper, the third year, slightly deeper than that, and after five years, if all has gone well, you'll be issue a unlimited license by the State of Maryland.

What is the best part of your career?

The part of piloting I really enjoy is going on so many different ships. Even though we're always on the Chesapeake Bay or Chesapeake and Delaware Canal, every ship is different, every day is different, the weather is always different, the crews are different, and I get a great deal of satisfaction from bringing these ships up the bay and through the narrow channels, no matter what the conditions are.

How has your work changed over the years? What role has technology played in those changes?

Unlike many industries, piloting has changed rather little over the millennium. We still climb up the side of a ship using a rope ladder, we still take over navigation, and we still primarily use our eyes and our knowledge to navigate a ship up and down the Chesapeake Bay. Some things have changed over the years. We, of course, now have portable radios so we can talk to other pilots and determine in advance how we're going to meet ...port to port, starboard to starboard in the narrow channels. We also have radar now, so we can see each other in the fog. And a more recent development has been differential GPS, which, when it's attached to our laptop computers, enables us to know exactly where the ship is relative to the center line at any moment and that's been a big help in times when ice has all the buoys under water, when snow or fog prevents us from seeing it anything outside of the ship's windows.

How does your work fit into the larger framework of the work at the Port?

Since the port is so completely interconnected, the pilots are just one piece of the puzzle that makes for a successful port call for a ship in Maryland. We are the first one that boards the ship at sea and we bring it up Chesapeake Bay to the port, but at that point, every other facet of the industry kicks in. As soon as we enter the port, the tug boats will come out and secure lines to the ship to help bring it in to the berth. Once it's at the berth, the line handlers will secure the ships' lines to the bollards. After the ship is secure, Customs and Immigration will come onboard to resolve any issues and make sure everything is secure. After that, the stevedores will take over and the longshoremen will discharge and unload the ship.

What advice would you have for anyone who wants to have the kind of career you have?

If you are at all interested in being a pilot in Maryland, you must make that decision in high school. You need to specialize in math and science courses so that you are admitted to the United States Merchant Marine Academy or one of the five state maritime colleges. After graduating from either those institutions, you need to be prepared to go to sea for ten to fifteen years before you will be qualified to apply to be a pilot in Maryland. The competition to be a pilot is very severe, as you might guess. We have hundreds of applications that apply to the Department of Labor, Licensing, and Regulation, and they are selected from that pool.