Advising for Growth: Coast Guard's 5th District Monitors Massive Mid-Atlantic Maritime Expansion

×

The CMA CGM Marco Polo, the largest container ship to call on a U.S. East Coast port, arrives at the Port of Virginia in May. *PORT OF VIRGINIA*

The Port of Virginia is something of a little-understood region on the nation's vast maritime map, and yet is one of the busiest, most strategically important ports in the nation.

Located at Hampton Roads, it ranks seventh among North America's largest ports, with five major terminals (compared to 25 at the Port of Los Angeles, the largest, and probably best-known port). It's a neighbor to the world's largest naval base, Naval Station Norfolk.

Like much of the nation's maritime infrastructure, the general public often doesn't see the mighty industrial lifting done at a port like the Port of Virginia, which employs nearly 400,000 people directly and indirectly and contributes about \$92 billion annually to Virginia's economy.

Its public profile could increase over time, not least due to the ever-expanding economy in the Mid-Atlantic region that has resulted in a 2.6% compounded annual growth rate since 2015, according to data from the Port of Virginia's 2020 Annual Report. The primary drivers of Virginia's transformative growth — which translates into more cargo, new jobs and bigger regional investments — is the arrival or expansion of multinational companies like Amazon, engineering giant Navien and Acesur, which specializes in IT and enterprise security.

Coast Guard Oversight

The 5th District of the U.S. Coast Guard, which has four sectors stretching from New Jersey to South Carolina, advises on how to accommodate this economic growth while making sure the waterways are also safe for traditional maritime uses.

Rear Adm. Laura M. Dickey, 5th District commander, says there have been a host of changes in Virginia and the rest of the region, from adapting to massive container ships to dealing with renewable energy needs and climate-related initiatives.

"There is a tremendous amount going on across the district," Dickey told *Seapower*. "In addition to our normal Coast Guard missions, we are really seeing an explosion of growth in the maritime transportation system, in the ports and in trying to keep up with that, making sure that the traditional uses of the waterways, and these new uses — or these growing uses — will work in concert with each other.

"And then where is our role in that? [We are] making sure that we're prepared for these changes that we're seeing, and doing our part to evaluate them, and doing so in a holistic way that integrates all the different aspects of what happens in a port, or the approaches to our ports from offshore."

Dickey said the Coast Guard team in the 5th District is adapting much like their maritime partners to new uses of the waterways, including offshore renewable energy initiatives — mainly wind farms — and, to a lesser extent, preparations for sea level rise.

With new construction in the region, for example, the Coast Guard is tasked with examining these projects and their parameters. It's more of an advisory role rather than a regulatory or law enforcement capacity, an important distinction given the cross-section of different interest groups and government agencies.

"The Port of Virginia is going through some amazing expansion, [and] there is a tremendous amount of activity going on," Dickey said. "We have our traditional [missions] but we also have some unchartered territory and this explosive growth that all has to be harmonized ... so that these activities in these ports happen safely and are done in a way that supports the economy but also takes into consideration all of the other traditional uses of our waterways."

Dickey said wind farms are at the center of new development throughout the 5th District. There are at least eight projects in development potentially in the Mid-Atlantic region. In Virginia, the Coastal Virginia Offshore Wind project is in its initial phase. Located about 27 miles off the coast of Virginia Beach, the pilot project consists of two 12-megawatt turbines that cost about \$300 million and are expected to generate enough electricity to power 3,000 homes. It is the second offshore wind farm operation in the United States after Block Island Wind Farm in Rhode Island.

"Wind farms are huge," Dickey said. "It is an emerging area, and it is one where the Coast Guard is not responsible for signing off on the permit, but we do play a role in advising the Bureau of Ocean Energy Management and others. Our role is to review the projects and see how they fit with traditional uses of the waterways to make sure that we are able to do our own missions."

The Coast Guard works with multiple partners, interest groups and fellow federal agencies on wind farm programs, having done so in the Northeast for more than two decades to support the construction of wind farms in Block Island and Nantucket Sound (the latter was rejected by local interest groups in 2017). Communication, transparency and sharing knowledge are the key to successfully executing such projects.

"If you have wind farms that are too close together, can you still do search and rescue properly in there, or do they run

into traditional fisheries grounds, or are they in the way of traditional or necessary fairways so that commerce can come in and out?" Dickey said.

"There are an awful lot of these projects. It is the wave of the future, and it is something that we are having to rapidly adjust to make sure that we're looking at things in a holistic way. We are working with headquarters and everybody to make sure that we come up with a process that is repeatable and standardized in a sense but is also flexible to adjust to the particulars of each project."

Dickey cited several port deepening projects, among them the Ports of Wilmington, North Carolina and Delaware Bay, where ongoing deepening and dredging of ports and harbors is essential for handling the increasingly larger container vessels coming daily through the port to one of the area terminals.

Dickey described a constant cycle of challenges in keeping up with growing trade volume at the Port of Virginia, which is the No. 1 exporter of vegetables and soybean products, and a leader in recycled wastepaper and animal feed exports.

×

The Ewell, a U.S. Army Corps of Engineers Norfolk District survey vessel, sails past cranes at the Virginia Port Authority's Norfolk International Terminal. The first phase of Norfolk Harbor's deepening project is set to begin next January. U.S. ARMY / Patrick Bloodgood

Fewer, but Larger, Ships

In late May of this year, the CMA CGM Marco Polo, the largest container ship to call on a U.S. East Coast port, arrived at Virginia International Gateway, marking a milestone for the Port of Virginia. The vessel is nearly 1,300 feet long and can carry 16,022 20-foot equivalent units.

"[Trade] is such a huge part of our economy and globalization

and the Coast Guard has got to make sure that it happens safely, and how do we do that," said Dickey. "The Coast Guard is agnostic on all of this. Our job is to make sure that maritime activity occurs safely and is deconflicted."

Also underway are tunnel and road expansions at the Chesapeake Bay Bridge-Tunnel and with the Hampton Roads Bridge-Tunnel (HRBT) Expansion Project. In a groundbreaking ceremony in October 2020, officials kicked off the \$3.8 billion HRBT Expansion Project, which will add twin, two-lane bored tunnels and widen portions of Virginia's Interstate 64 to reduce congestion and ease access to the Port of Virginia and Naval Station Norfolk. The project, which gets underway in 2022, is the largest infrastructure project in the commonwealth's history.

"The [projects] are going on across the Mid-Atlantic region as these ports all try to remain competitive," Dickey said. "It is an interesting thing where the volume of ships goes down because [the vessels] are able to carry so much more. But you need to accommodate these large ships, and what does that do for the safety of ships as they try to pass each other in channels? Does it shut down things?"

Dickey said her team in the 5th District is doing is Port Access Route Studies, or PARS, which ensure, in part, that new projects and construction are integrated with the potential future uses of areas.

"How do we make sure that the waterways and approaches to our ports are deconflicted with all the different types of things that people want to do?" Dickey said.

"We are reviewing the access to ports. How do we get ships moving in and out of our ports and navigating here in the safest manner, and then what is the impact of a wind farm? Where can those even be permitted to be leased, [and] does that fit with access to the ports? That entails outreach to

all the stakeholders, whether that is private industry, the DoD, recreational users, commercial fishing users and environmental groups," she said.

"We are well postured, because we are very tightly [linked with] our port partners in each location. We have area maritime steering committees and consultative groups where we know most of the folks, so we get a sense of what's going on and what the impact might be, and then we take a look at these projects."