NAVSEA SIOP Office Leading $21 billion Naval Shipyard Modernization

WASHINGTON – A new Navy program office will centrally coordinate a plan to recapitalize its four public shipyards, the Naval Sea Systems Command Office of Corporate Communication said in an April 3 release.

The Naval Sea Systems Command (NAVSEA) Shipyard Infrastructure Optimization Plan (SIOP) Program Office, PMS-555, established in June 2018, is working in concert with Commander, Navy Installations Command (CNIC), and Naval Facilities Engineering Command (NAVFAC) to recapitalize and modernize the infrastructure at the four public nuclear shipyards to include critical dry dock repairs, restoring needed shipyard facilities and optimizing their placement, and replacing aging and deteriorating capital equipment.

Executing this plan will improve the naval shipyards' productivity and increase their maintenance throughput to support the combat readiness of the Navy.

Without major upgrades and reconfigurations, the shipyards would not be able to meet the fleet's future aircraft carrier and submarine depot maintenance and inactivation requirements looking out through 2040.

"The Navy relies on NAVSEA to deliver combat-ready ships and submarines out of planned maintenance availabilities on time," said NAVSEA Cmdr. Vice Adm. Tom Moore. "Modernizing our four naval shipyards – a massive task under any circumstance – is critical because it's the only way we will be able to meet our future mission requirements."

"This is a comprehensive plan, developed in partnership with

NAVFAC and CNIC, that will allow the Navy to bring its organic shipyards into the 21st century to fully support the Navy the nation needs," Moore added.

The Navy's four public shipyards – Norfolk Naval Shipyard, Portsmouth, Virginia; Portsmouth Naval Shipyard, Kittery, Maine; Puget Sound Naval Shipyard and Intermediate Maintenance Facility, Bremerton, Washington; and Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, Pearl Harbor, Hawaii – were originally designed and built in the 19th and 20th centuries to support construction of sail- and conventionally-powered ships using industrial models of the time. As a result, they are not configured to maintain and modernize nuclear-powered aircraft carriers and submarines.

Developing, programming and executing the plan falls to the PMS-555 program office, which is staffed by industrial engineers, process improvement specialists, facilities engineers, regulatory compliance specialists, strategic and financial analysts, Civil Engineer Corps officers, construction managers and construction schedulers from NAVSEA, CNIC and NAVFAC.

"The Shipyard Infrastructure Optimization Plan articulated a vision that shipyard infrastructure has three interdependent components: the dry docks, the facilities and the capital equipment; and that these configurations are fundamentally linked to the shipyards' ability to execute the mission they are tasked to do," said Steven Lagana, PMS-555 program manager.

"We are utilizing modeling and simulation as a tool to integrate these components to better inform the desired infrastructure layout. Through this, the Navy will be in a better position to make meaningful, long-lasting investments that not only address the condition of the facilities and equipment but also change the way the work is conducted. Once we're finished, the Navy will recover more than 300,000 work

days per year, every year.”

The first milestone PMS-555 is scheduled to achieve is the development of a “digital twin” of the naval shipyards. This will be a virtual representation of the shipyards that will be used to conduct modeling and simulations of the shipyard environment to aid in evaluations and decisions for the future shipyard infrastructure. The program office is also developing comprehensive strategies to address historic preservation and environmental compliance during this recapitalization effort.

The program office is hosting its first industry day April 8 at the Washington Navy Yard.

“We’re sold out,” Lagana said. “We have more than 100 companies from 19 states and the District of Columbia who are coming to hear about the program and see how they can be part of this once-in-a-century team that will deliver the shipyards the Navy needs.”