Naval Foundry and Propeller Center Delivers Final Propulsor Component for First Columbia-class Submarine

Members of the Naval Foundry and Propeller Center (NFPC) celebrate the delivery of the final propulsor component for the Columbia-class lead ship, the future USS District of Columbia (SSBN 826). (U.S. Navy photo)

By Naval Foundry Propeller Center Public Affairs, April 11, 2025

PHILADELPHIA – The U.S. Navy's Naval Foundry and Propeller Center (NFPC) delivered the final major propulsor component for the first Columbia-class ballistic missile submarine (SSBN), the future USS District of Columbia (SSBN 826), to General Dynamics-Electric Boat (GDEB) Apr. 8. GDEB accepted

the component in Philadelphia, and transported it to the shipyard in Groton, CT, where it arrived April 10.

The delivery marks a historic milestone for NFPC, and the culmination of a years-long project. Well before the ship's keel was laid in 2022, NFPC was working on patterns, molds and castings for the propulsor – with the first sub-component pour in 2019 and the final large component being cast in 2021.

NFPC's journey to produce the propulsor for the District of Columbia has pushed engineering innovation to new heights, resulting in multiple record-breaking pours for nonferrous castings in the U.S. The largest casting was over 260,000 pounds and is already at GDEB for installation. Collectively, NFPC poured nearly 1 million pounds of bronze and removed well over 200,000 pounds of machine chips on the lead ship project.

Once completed, the District of Columbia will be the first ship of its kind, set to replace the Navy's current Ohio-class SSBNs. The Columbia-class is the Nation's future Sea Based Strategic Deterrent, the Navy's number one acquisition priority, and will provide the most survivable leg of the Nation's strategic triad. The class will ensure continuous sea-based strategic deterrence into the 2080s and will be the largest, most capable and most advanced submarine produced by our Nation.

NFPC has produced four components for District of Columbia. Once completed at the foundry, the components are transported by truck or barge to GDEB shipyard, which is responsible for final assembly of all Columbia-class submarines.

In addition to producing propulsors for the next three ships in the Columbia-class, NFPC continues work for the Navy's Virginia-class fast attack submarines.

NFPC has been manufacturing propellors and propulsors for the U.S. Navy for more than 100 years in Philadelphia. The current

workforce benefits from a wide range of individual experience, with team members ranging from trade school graduates to seasoned engineers and mechanics with over 40 years of service. NFPC offers unique capabilities and capacity, achieving its mission to design, manufacture and deliver precision machined propulsor castings for undersea superiority.