HII Division Delivers First 3-D Metal Part for Installation on Nuclear-Powered Aircraft Carrier

NEWPORT NEWS, Va. – Huntington Ingalls Industries' (HII's) Newport News Shipbuilding division has achieved a milestone in the integration of additive manufacturing into the design and fabrication of components for nuclear-powered warships. The company has delivered the first 3-D-printed metal part to the U.S. Navy for installation on an aircraft carrier.

The milestone was recognized during a brief ceremony Jan. 29 at Naval Station Norfolk. The part was presented to Rear Adm. Lorin Selby, Naval Sea Systems Command's chief engineer and deputy commander for ship design, integration, and naval engineering. The part – a piping assembly – will be installed on the aircraft carrier USS Harry S. Truman and evaluated for a one-year period.

"We are pleased to have worked so closely with our Navy partners to get to the point where the first 3-D metal part will be installed on an aircraft carrier," said Charles Southall, Newport News' vice president of engineering and design. "The advancement of additive manufacturing will help revolutionize naval engineering and shipbuilding. It also is a significant step forward in our digital transformation of shipbuilding processes to increase efficiency, safety and affordability. This is an accomplishment we all should be proud of."

NAVSEA last year approved the technical standards for 3-D printing after extensive collaboration with the company and industry partners that involved the rigorous printing of test

parts and materials, extensive development of an engineered test program, and publishing of the results. The highly digitized process could lead to cost savings and reduced production schedules for naval ships.