By DON Innovation

A Fabrication Laboratory, or “Fab Lab,” supports additive manufacturing, digital fabrication, and other parts manufacturing technologies which differ significantly from conventional methods. Fab Labs comprise a suite of digital fabrication and rapid prototyping machines, typically including a high resolution Computer Numeric Control milling machine, laser cutter, wood router, 3D printer, and the accompanying computers, software, and electronics for design, programming, and machine communications.

Additive manufacturing affords extraordinary agility over traditional manufacturing, procurement, and acquisition methods, leading the DON to radically enhance fleet life cycle logistics, increase the operational availability of our naval forces, and reduce total ownership costs.

160928-N-IL267-002 WEST BETHESDA, Md. - 160928-N-IL267-002 QUANTICO, Virginia (Sept. 28, 2016) Jonathan Hopkins, a member of the Additive Manufacturing Tiger Team and employee of Naval Surface Warfare Center, Carderock Division, holds up a 3-D printed symbol at the Modern Day Marine Expo at Marine Corps Base Quantico, Va. This symbol represents Naval Sea Systems Command, Naval Aviation Systems Command, Marine Corps Systems Command, the Marine Corps Warfighting Laboratory, and Marine Corps Headquarters, Installations and Logistics Department, all of which collaborated on an additive manufacturing parts demonstration at the expo. (U.S. Navy photo by Dustin Q. Diaz/released)

151202-N-DI674-004 Dahlgren, VA - During a recent Print-A-Thon, NSWCDD instrumentation engineer Kevin Streeff demonstrated how the 3D ScanArm is used to scan objects and create digital models for printing. A digital model of the scanned bust is shown on the computer screen during a recent Print-A-Thon.
Senior Chief Machinery Repairman Sean A. Boykin explains the functionality of a 3-D Computer Numerically Controlled (CNC) Router to VADM Thomas J. Moore, Naval Sea Systems Commander inside the Fabrication Laboratory, or Fab Lab, at Southeast Regional Maintenance Center (SERMC).