Partnerships

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Partnership Strategy. The Naval Additive Manufacturing X3D Model Exchange: Preliminary Operational Capability project is a part of a larger roll out to share 3D models that support Naval Additive Manufacturing (AM). This Naval Research Program (NRP) effort is translating a National Institutes of Health (NIH) 3D Model Exchange server to make it applicable for Naval use. It is intended to help the Navy and Marine Corps define requirements for model sharing, user interfaces, and cyber protection of both systems and 3D data. Developmental testing in the .edu domain supports future expeditionary prototyping, informing a roadmap being assembled by Naval Facilities Engineering Command (NAVFAC) in collaboration with SPAWAR using the Navy Marine Corps Intranet (NMCI). Additional broad development work that explores support for the Marine Corps is proceeding in parallel. These potential operational capabilities can inform future operational requirements, further supporting collaborative exploratory efforts by NAVFAC Engineering and Expeditionary Warfare Center (EXWC). In turn, this combined work is intended to inform future operational capability requirements that the Navy is working to develop with other Department of Defense (DoD) commands.

Primary NPS focus. Collaboration with many partners continues. Foremost is working with NPS students and innovative active-duty users. We learn a lot by unlocking barriers that inhibit deployed practitioners, supporting future operational capabilities. Server projects, student theses and reports will document capabilities, present “lessons learned” and provide recommendations for Navy logistics to eventually operationalize interchange servers for afloat /ashore usage.

Fabrication Laboratories (Fab Labs) and Maker Spaces. Fab Labs are design and fabrication shops outfitted with modern digital tools and equipment. Equipment includes laser cutters, routers, 3D printers, vinyl cutters for flexible circuit boards and digital design tools that use open-source software. A Maker Space is a collaborative work space used for making, learning, exploring and sharing that uses high tech to no tech tools. Follow Navy Makers (@NavyMaker) and Marine Makers (@MarineMaker) on Twitter.

- National Institutes of Health (NIH) 3D Model Exchange Brief

Feedback is welcome! Please let us know what you think.