News Release from the NAVFAC Headquarters Public Affairs & Communications Office

FOR IMMEDIATE RELEASE
May 12, 2016

Contact: Don Rochon
E-mail: don.rochon@navy.mil
Voice: 202-685-9105

NAVFAC to Showcase Innovation at Sea-Air-Space Expo

WASHINGTON – Naval Facilities Engineering Command (NAVFAC) will demonstrate the Navy's first enterprise-wide, three-dimensional scene visualization tool (SPIDERS 3D) for Navy and Marine Corps installations at the Navy League's Sea-Air-Space Exposition, May 16-18.

"NAVFAC is meeting the Secretary of the Navy's challenge to drive innovation into Navy business practices and improve ways to connect people, ideas and information on an enterprise-wide level," said Alex Viana, SPIDERS 3D project lead. "We partnered with the Navy Installations Command to deliver interactive, geospatially accurate, virtual 3D naval installation environments to improve advance planning and identify risks for introducing new ships, subs and aircraft into the shore environment."

Navy planners and engineers use the SPIDERS 3D tool to support major defense acquisition programs by visualizing platform-to-shore interface design concepts and by identifying potential incompatibilities and risks early in the design process. Consequently, this enables earlier consideration of program alternatives for installations worldwide.

One critical aspect of SPIDERS 3D is that it allows multiple users across the Navy enterprise to conduct real-time 3D collaboration over the web on their desktop. The program currently contains more than 100 virtual 3D Navy and Marine Corps installations and 300 different 3D models of weapon platforms, shore support equipment, shore infrastructure and base facilities.

The web-based Extensible 3D (X3D) technology implemented in SPIDERS 3D provides a framework to increase 3D data interoperability. X3D is a royalty-free, open-standard file format and run-time architecture to represent and communicate 3D scenes and objects using extensible markup language. It also enables repurposing of other 3D data, and is complementary with emerging digital thread technologies, such as 3D scanning and 3D printing.

NAVFAC is delivering these virtual 3D environments to Navy systems commands, program executive offices, and fleet and shore enterprise stakeholders to improve the pace of technical, geospatial-based collaboration and decision support in many different areas, including systems engineering, shore planning, product design, security planning, environmental, and cultural resources management.

-30-