

# Navy Implements New Process to Standardize Development of Autonomous Unmanned Systems



A Knifefish Unmanned Undersea Vehicle (UUV) transits the Massachusetts Bay at the completion of a mission during an operational test conducted by members from Operational Test and Evaluation Force (OPTEVFOR). *U.S. NAVY / Mass Communication Specialist 1st Class Brian M. Brooks*  
NATIONAL HARBOR, Md. – The U.S. Navy is implementing a six-phase process to improve and standardize the development of autonomous unmanned systems, according to an official.

Pete Small, program manager for unmanned maritime systems (PMS 406) said Monday at Navy League's Sea-Air-Space Expo in National Harbor, Maryland, that this process "represents the future of autonomous capability."

"From day one, we know these platforms need to be upgradeable and interoperable," Small said, noting that the Rapid Autonomy Integration Lab (RAIL) was key to achieving that.

To accomplish this, the program starts with a "software factory" approach, where software is rapidly developed, tested, and certified for autonomous capabilities.

The second phase is "DevSecOps," which are a set of automated software tools, services, and standards that allow programs to develop and deploy applications securely.

The third phase is peer groups, who identify autonomy gaps, requirements, and performance metrics.

The fourth phase is Common Control, which standardizes vehicle planning and control across platforms. That is followed by Unmanned Maritime Autonomy Architecture, which standardizes

autonomy interfaces.

The sixth phase involves making data available to support artificial intelligence and autonomy development.