

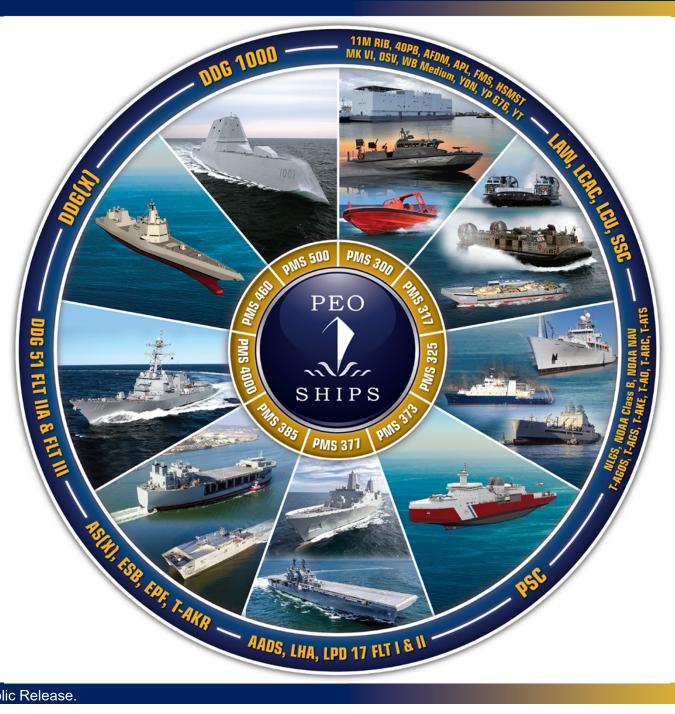


### **TEAM SHIPS**



# **PEO Ships Overview**

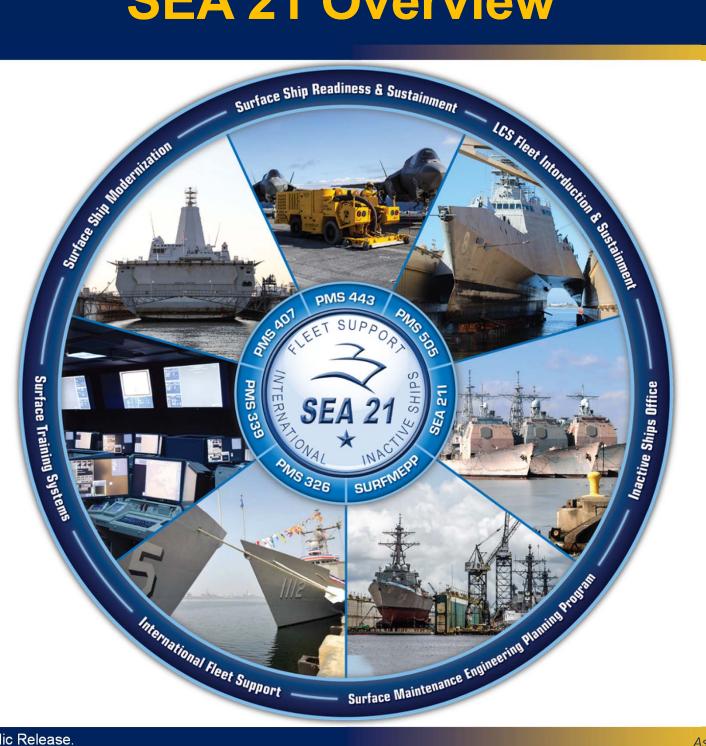






# **SEA 21 Overview**











## N231-028 - Artificial Intelligence/Machine Learning (AI/ML) Hull Mechanical & Electrical Controls

Develop autonomous controls to significantly reduce the cognitive burden on operators in the monitoring, operation, actuation of engineering plants, detection, diagnosing, troubleshooting, and recovery of machinery casualties to improve long-term operation and sustainment of Navy surface combatants.

**Transition Program:** PMS 460, DDG(X) Guided Missile Destroyer



#### N231-033: Radio Frequency Transparent AN/SPY-1 Array Cover

Develop a Radio Frequency transparent protective cover for the AEGIS AN/SPY-1 Array that extends the life of the array coating. The covers should be removable for replacement, refurbishment or repairs and must be designed to encapsulate the array face while allowing access to array alignment points.

Transition Program: PMS 407, Surface Ship Modernization







#### N231-039: Boat & Combatant Craft Electric Drive Propulsion System

Develop a marinized, electrically driven propulsion system to increase fuel economy and reduce noise. Current engines tend to be very inefficient at loiter speeds resulting in inefficient fuel consumption. The new system should enable total ownership cost reduction through reduced fuel consumption and less maintenance, as well as more efficient operation at loiter speeds.

**Transition Program: PMS 300, Boats & Combatant Craft** 



#### N231-040: Rugged High-Temperature Superconductor Wire Bundles

Develop an HTS wire bundle that can be pulled throughout the ship and cut to length at the time of installation. This will eliminate the need to fabricate pre-determined cables with fixed lengths. In the event that extra lengths of cables are required, cables would not need to be re-manufactured. The new system will be used in installation of magnetic degaussing systems pre and post delivery.

**Transition Program: PMS 377, LPD 17 Amphibious Transport Dock** 







# N231-041: Improved Distance Measurement During Underway Replenishments (UNREPs)

The Navy is seeking the development of a portable device to replace the current phone/distance line. It should provide the capability to accurately measure the distance between two ships and provide wireless communications during Underway Replenishments. During UNREPs, two ships must maintain a precise safe operating distance between ships.

**Transition Program: PMS 400D, DDG 51 New Construction** 



#### N231-043: Extreme Cold Weather Resistant Gasket Material

As the Navy sails continues to sail in Polar regions, seals and gaskets are exposed to extreme cold weather which increases the potential for performance degradation and premature seal failure. Navy is seeking a durable gasket material capable of withstanding temperatures as low as -50°F and that can sustain heavy loads and other forces associated with ship motion.

**Transition Program: PMS 400D, DDG 51 New Construction** 







## N231-050: Autonomous Crane System for Payload Motion Control

The Navy seeks the development of a cargo stabilization system to accommodate different load types in a safe and timely manner without requiring assistance from tag line handlers. Tag line handlers are frequently exposed to hazards and are in close proximity to the moving payload.

**Transition Program:** Strategic and Theater Sealift (PMS 385)