

## **State of the Panel Sustainment Panel**

Kirsten Walkup, Panel Chair

*General Dynamics-Bath Iron Works*

# Mission

*“The Sustainment Panel has the mission of reducing the cost of ship logistics and sustainment activities to include repair, maintenance and modernization while increasing operational availability for manned and unmanned vessels. Panel focus will be placed on advancing technologies, materials, processes and procedures that realize greater efficiencies in lifecycle sustainment. The Panel also includes researching and evaluating opportunities for implementation of digital tools, new technology, and processes to increase operational availability.”*

# Focus

- Incorporate sustainment considerations in the design phase of manned and unmanned vessels and components to support ship maintenance and modernization of hull, mechanical, and electrical as well as mission system infrastructure
- Develop and implement new inspection and maintenance processes and procedures to support minimal time in availabilities.
- Develop processes to improve material/early condition assessments and prognostic monitoring tools to support condition based maintenance and structural health.
- Develop and implement life cycle cost modeling for flexible adaptable manned and unmanned systems as compared to traditional ship building practices.

# Benefits

- Chief among the benefits of Sustainment Panel's focus is reducing cost and schedule impacts on maintenance and modernization availabilities.
- The Panel seeks to leverage advancing technologies against increasingly complex schedule, cost, materials, and logistical challenges faced by the waterfront.
- Together with current panel projects, the Sustainment Panel will pursue and promote impactful initiatives with strong benefit demonstrated through reduced costs and schedule, and increased capability.

# Current Projects

## Sustainment Panel Projects

- Alternate Blocking Materials – DM Consulting
- Team Members: Austal USA, Naval Station San Diego

The goal of exploring alternate blocking materials is to be able to reduce the cost of wood materials consumed for each dry docking and extend the service life of the concrete blocks, reducing the overall shipyard operating cost and local environment impact.

- Equipment Sight/Site Validation Tool – HII, Ingalls Shipbuilding
- Team Members: General Dynamics – Bath Iron Works

This project's goal is to explore current capabilities of existing electronic tools and software and/or develop a software/tool that will meet our sight validation requirements.

## Joint Panel Project, Sustainment / Ship Design & Material Technologies

- Using MELD to Additively Manufacture Flight Deck Tie Downs – Hepburn and Sons
- Team Members: MELD Manufacturing, HII – Ingalls Shipbuilding, NSW Carderock, NSW Philadelphia

The project goal and objective are to create flight deck tie downs using the AFSD method of AM while maintaining the geometry and function of current tie downs reducing cost and schedule for Navy shipbuilding.

# Questions?

