

# **NSRP Surface Preparation and Coatings (SPC) Panel Update**

**Conlan Hsu, Panel Chair**

**September 12, 2023 – Key West, FL**

# Mission



## Specs to Decks Approach

Improve current processes and develop emerging technologies that will reduce cost and improve quality

# Purpose

## What We Do

- Engage suppliers, applicators, and specifiers of preservation systems, including NAVSEA
- Coordinate Panel meetings, facilities tours, and demos to encourage active participation
- Partner with industry experts

## Why

- Ensure a common understanding of requirements and what's next
- Enable the panel to grow and learn from each other
- Increase the overall success of the panel, shipyards, and Navy

# Benefits

## **US Navy – NAVSEA**

- Address opportunities, issues, and concerns
- Inclusion in the review and selection of Panel Projects
- Enhance the annual SSRAC review of Navy Standard Item 009-32
- Provides ROI from implemented projects

## **Member Shipyards**

- Interact with NAVSEA TWH
- Learning from other Shipyards
- Funding Opportunities  
*(RAs, Panel Projects, Joint Panel Projects)*

## **Suppliers**

- Understand customer needs

## **Associations - Academia**

- Develop the next generation of “Job Ready” Shipbuilders

# SPC Panel Steering Committee

## **Member Shipyards & NAVSEA**

- Austal USA – Shawn Wilber
- BAE Shipyard – Patrick Kitchel
- Bath Iron Works – Brian Thiele
- Electric Boat – Chris Wowk
- Ingalls Shipbuilding – John Walks
- Marinette Marine – Jason Steinfeldt
- NASSCO – Angel Zepeda
- Newport News Shipbuilding – Conlan Hsu
- NAVSEA 05 – Mark Ingle & Howard Castle

## **Panel Officers (10/1/21-9/30/23)**

- Panel Chair – Conlan Hsu
- Panel Vice-Chair – Angel Zepeda
- TWH – Mark Ingle
- DTWH – Howard Castle

## **NSRP / ATI**

- Ryan Schneider – Project Manager
- Lydia Szydlo – Panel Coordinator

## **AMPP Global Center (7/1/21-6/30/24)**

- Steve Cogswell – Board of Directors
- Arcino Quiero – Board of Directors

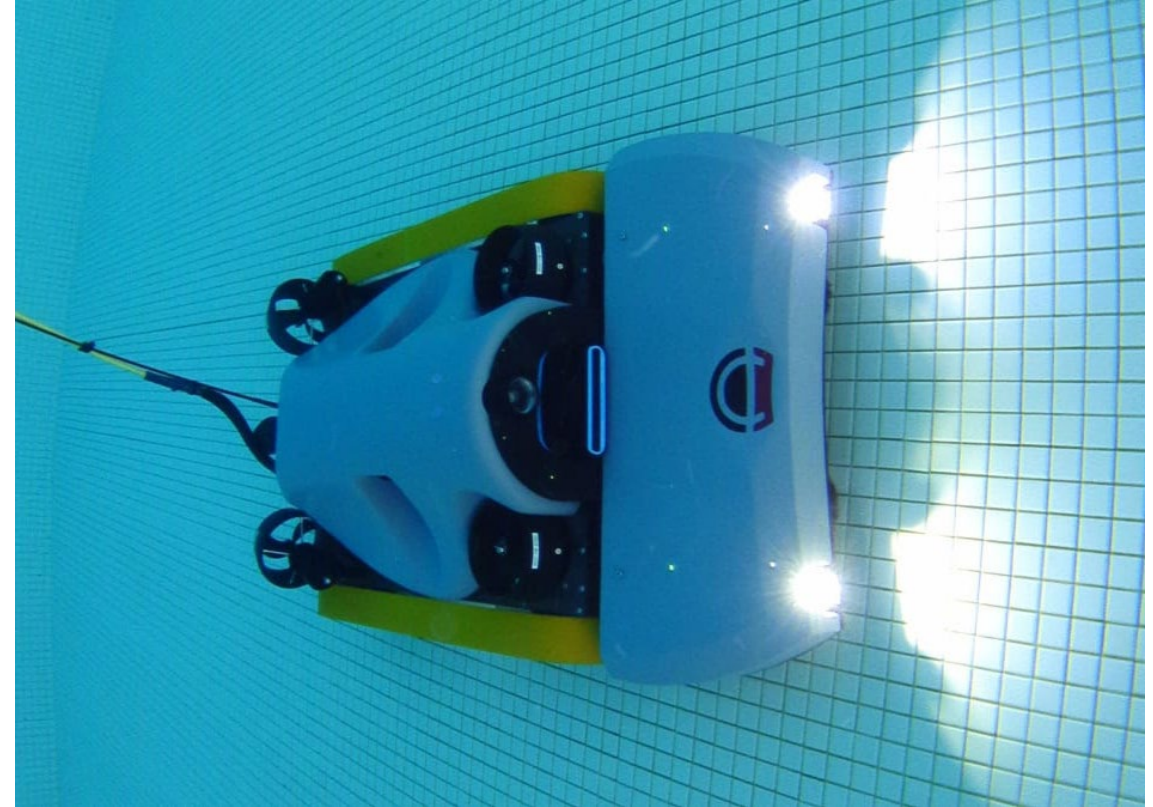


# 2023 Meeting Theme

## Testing



## New Technology



# SPC Panel Projects

- Testing
- New Technology

**Initiated Projects 2023:**

- ❖ *Cleanable Nonskid Deck Covering – Panel*
- ❖ *Ultra Heat Resistant Primer – Panel*
- ❖ *Zinc-Rich Coatings Over High Strength Steel – Panel*
- ❖ *Transition of Power Tool Optimization - RAP*
- ❖ *Implementation of SP-18 in Construction – RAP*

**Completed Projects 2019-2020:**

- ✓ *Optimize Power Tools Surface Preparation* 2020
- ✓ *Survey of Surface Prep & Coatings Automation*
- ✓ *Standardization and Digitization of Visual Inspection for Shipbuilding & Repair*
- ✓ *Primers with Extended AF Overcoat Window Surface Preparation*
- ✓ *Certification Program – Shipbuilding Industry Surface Prep & Coatings Training*
- ✓ *Virtual Spray Paint Training System* 2019

**Completed Projects 2014-2018:**

- ✓ *Thermal Insulating Aerogel Filled Coatings*
- ✓ *Evaluation of Plasma Coating Removal & Surface Preparation* 2018
- ✓ *Partial Blast of UHS Coated Tanks II*
- ✓ *Retention of Type VI Epoxy under Ultra High Solids* 2017
- ✓ *Boomlift Carried Environ. Enclosure*
- ✓ *Implementation of Paperless Paint* 2016
- ✓ *Universal Primer & Surface Prep Process*
- ✓ *Partial Blast of UHS Coated Tanks*
- ✓ *Technical Guide for Inaccessible Void Coatings & Treatments* 2015
- ✓ *Reducing Inspection Costs Using the Latest Digital Inspection Tools*
- ✓ *Cost Savings Comparison in Applying Polysiloxane vs. Silicone Alkyd Topcoats*
- ✓ *Paperless Paint Documentation II* 2014

# 2024 Proposed SPC Panel Projects

- **Quiet Technology – Reducing Surface Preparation Noise Levels (Workforce)**
  - **Rapid Prep**
    - GD-EB, GD-BIW
- **Testing and Analysis of Anti-Biofouling Coatings (Sustainment)**
  - **Hepburn & Sons**
    - NRL, Biointerphase, Scale Materials, Coval Technologies
    - NNS
- **Enhanced Primers for Welding Operations (Welding)**
  - **Elzly Technology Corp**
    - FMM, NNS
- **Evaluation of Anti-Fungal and Mold Prevention Technologies for Naval Ships**
  - **Elzly Technology Corp**
    - NNS
- **Laser Ablation and Surface Preparation Testing**
  - **Laser Photonics**
    - FMM
- **The Effects of Blast Media on Production and Coating Performance**
  - **Elzly Technology Corp**
    - NNS, FMM, GD-NASSCO, GD-EB



# Upcoming Events

| Event                          | Date                   | Location        |
|--------------------------------|------------------------|-----------------|
| SNAME Maritime Convention 2023 | September 27-29        | San Diego, CA   |
| AMPP Conference & Expo 2024    | March 3-7, 2024        | New Orleans, LA |
| ShipTech                       | March 21-22, 2024      | Charleston, SC  |
| MegaRust                       | May 21-23, 2024        | San Diego, CA   |
| NSRP SPC Panel Fall Meeting    | September 2024         | TBD             |
| SNAME Maritime Convention 2024 | September/October 2024 | TBD             |
| NSRP Day at NAVSEA             | TBD                    | DC Navy Yard    |

# Path Forward

## Challenges

- Aging population
- Labor shortage
- Member yard involvement

## Opportunities

- New members/perspectives
- Evaluate automation and technologies to improve efficiency
- Explore solutions from other industries

# Questions?

