



NAVSEA 04 / CWP Update

April 22, 2014

NSRP Surface Preparation & Coating Panel

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Agenda



- CWP Updates
 - Rinsing of Freshly Painted Potable Water Tanks
 - Laser Coating Removal
 - Decon Gel for Surface Prep
 - Paint Receipt Inspection
 - Single Coat
- Other SEA 04 Updates
 - zeroG Arm
 - Mantis
 - Other Items of Interest



CWP Overview



- **Submarine and Aircraft Carrier Depot Maintenance cost and schedule improvement**
- Eliminate unnecessary or unnecessarily cumbersome (i.e., non-value added) **TECHNICAL AUTHORITY REQUIREMENTS**, where appropriate (CWP).
 - E.g., NSTM and Class Maintenance Plans
- Streamline procedures and cycle time for technical authority qualification, approval, and implementation of **NEW PROCESS TECHNOLOGIES** for depot maintenance process improvement (REPTECH)
 - E.g., Heat Induction Coating Removal System
- Streamline procedures and cycle time for technical authority qualification, approval, and implementation of **NEW PROCESS / MATERIALS** for depot maintenance process improvement (ERM)
 - E.g., Rapid cure one-coat paint
- Support the efficient and effective development and implementation of industrial processes required for maintenance/repair of **NEW SYSTEMS AND COMPONENTS** on new (or legacy) ship classes



Update on CWP Items



- **Laser Ablation Coatings Removal (CWP-371)**
 - Coordinated effort of CWP (NNSY), Newport News / CCAM, and NSRP Projects
 - Summary of findings discussed Mark Ingle (Coatings and Corrosion Control TWH) and Joe Blackburn (Ferrous Materials TWH)
 - **Next Step:** Provide compilation of information to Naval Surface Warfare Center Philadelphia for independent assessment
 - Result of assessment will provide determine what additional testing is required (if any) and what applications will be initially allowed
- **NFO Tank Cleaning/Preservation (CWP-364)**
 - Use of high pressure water to clean tank / remove oil and enable painting
 - Equipment delivered to Naval Shipyards
 - USS TOPEKA (PNSY) and USS ALBANY (NNSY) recently completed
 - Maintenance Standard, Work Packages, etc. being changed to require clean and paint for submarine NFO tanks



Update on CWP Items



- **New Item - Use of Cleaning Gels for Improved Surface Preparation (CWP-378) (a.k.a. DeconGel)**
 - Alternative method for surface cleaning prior to preservation
 - Initial meeting held Thursday, 15 August
 - There has been a considerable amount of past work with this product, including at Pearl Harbor NSY&IMF, and an FY12 Paint Center of Excellence (PCoE) Project
 - An associated NSRP Panel Project did not make the cut for funding
 - Opportunity for use in dirty tanks, aluminum cleaning, non-skid cleaning, and other applications.



Update on CWP Items



- **Single Coat (CWP-345)**
 - Given five (5) satisfactory inspections from TRF Kings Bay, decision made to approve single coat for Submarine Sanitary Tank application,
 - Status: Awaiting update to SI 009-32
- **Paint Receipt Inspection (CWP-287)**
 - Paint vendors now providing required CoC's, but we still have some coating formulations to update
 - Providing for more streamlined paint delivery
 - End goal of nearly eliminating shipyard receipt inspection testing of coatings
- **Potable Water Tank Cleaning Requirements (CWP-373)**
 - CWP 373 was initiated to evaluate the need for the two potable water rinses and to determine if a less costly process based on wiping all tank surfaces could provide equivalent levels of acceptably clean potable water from repainted tanks.
 - The CWP team recommended a change to the current requirements and to only perform the wipe down process using a clean, dry rag and potable water.

Status: Awaiting SI 009-32 Update



Other Paint Related SEA 04 Initiatives



- zeroG Arm
 - Portsmouth NSY looking for use with Miami dismantling
 - Puget Sound NSY has over 12 in operation
 - Norfolk NSY is using 1 with intentions to expand
 - Performing Hand-arm vibration study on Sept 17
 - Received corporate (private and public shipyards) approval for using water lance on JLG
- Ergonomics (painter and blaster)
 - Honeywell respirator
 - Protective vest
- Advanced Manufacturing





Other Relevant Updates



Communities of Practice (CoP)

- Stand-up of 7 trade-specific CoPs
- Lead by shop superintendents with participation from engineering and other support codes
- Preservation & Services (CoP) – Meeting 5-9 May at PNSY

Desired Way Forward (in order of priority)

1. New surface cleaning tools
2. Explore new coating removal procedures (e.g. laser, robotics, etc.)
3. Improved Planning and Execution of Tank and Void Maintenance
4. Expanding use of new coatings (e.g. polysiloxane, single-coat, etc.)



Questions?

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