



White Paper Project

Status Report

IMPROVED RULES FOR PAINTING US NAVY SHIPS DURING NEW CONSTRUCTION AND REPAIR

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- **GOAL:** Reduce the costs and cycle time for preservation by reducing or streamlining the current requirements.
- **TEAM:** Electric Boat, NASSCO, NAVSEA 05P23
- **CONCEPT:** Have end-users perform a review of the rules from a productivity standpoint and make recommendations for changes that can reduce costs without affecting performance.



Approach

- **Develop a consolidated list of rules (NSI 009-32 FY08).**
- **Prioritize the list on basis of impact to coating performance.**
- **Obtain input from NSRP shipyards regarding rules that impact cost and cycle time the most.**
- **Obtain recommendations from NSRP shipyards as to which non-value added requirements should be changed / deleted.**
- **Review IMO and ABS NVRs and compare to Navy rules.**
- **Compare paint manufacturer's requirements to current Navy requirements and see if / how the differences affect costs & cycle times.**
- **Determine if high impact rules can be eliminated. Determine if testing is needed to prove viability of any proposed rules.**
- **Draft new rules to be proposed at the next SSRAC meeting July 2008.**



High Level Status

- Initial review of FY 08 009-32 completed
- Matrix of likely cost drivers is being developed
- Input from 2007 SSRAC meeting has been included
- ABS Naval Vessel Rules and ISO ballast tank coating rules have been reviewed
- Paint manufacturer's recommendations have been compared to current requirements
- Working on ROM cost / savings issues



Likely Cost Drivers in NSI 009-32

1. Inability to retain preconstruction primer in tanks and free flood spaces
2. Dehumidification requirements more strict than the paint manufacturer requires
3. Mandatory training and certifications for personnel
4. Various record keeping requirements (also in NSI 009-26)
5. Limited to moderate flash rust on water jetted surfaces
6. Paint storage requirements that are more strict than paint manufacturers allow
7. Non-uniform rules for surface ships versus submarines
8. Technical requirements whose limits are too narrow
9. Imprecise wording and variation in local interpretation of rules



SSRAC 2007 NSI 009-32 Changes

- **A total of 140 changes were proposed**
- **89 were identified as not affecting cost**
- **51 were identified as potentially reducing cost**
 - **23 were not adopted**
 - **28 were adopted with modifications**
 - **24 would result in theoretical savings, but calculation of actual savings will be very difficult**
 - **4 would allow for calculable savings**



SSRAC 2007 Adopted Changes Whose Savings Can Be Quantified

- **Simplified record keeping requirements for spot repairs**
- **For Mil-DTL-24441 paint applications, the requirement to clean surfaces with soap and water prior to applying mist coats was changed to clean per SSPC-SP-1**
- **Paperless QA data recording and electronic submission of records to eliminate redundancy**
- **Reduce number of 'G' point inspections (saves Government money)**



Changes Not Adopted at SSRAC 2007 That Had the Largest Potential Savings

- **Allow paint to be stored in accordance with paint manufacturer's instructions**
- **Allow some checkpoints for measuring environmental conditions to be eliminated**
- **Allow over-coating of pre-construction primers in tanks and free flood spaces**



Plan for Project Completion

- **Determine the requirements that have the most impact on shipyard costs based on our review and NSRP shipyards input.**
- **Compare those requirements to commercial industry requirements (US and International)**
- **Develop ROM savings and proposed changes based on comparison of requirements**
- **Recommend changes to NSI 009-26 and 009-32 for SSRAC 2008**
- **Recommend to NAVSEA a data-driven method for proposing and reviewing changes that has better definition of costs and savings**



Request for NSRP Shipyards

- **Identify 5 top cost drivers related to NSI 009-32**
- **Identify proposed changes that would most benefit your shipyard**
- **Identify ROM savings (labor, material, schedule) that could be achieved with your proposed change**
- **Respond to us by October 31**
- **All replies will be kept confidential**



Questions or Comments

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