

Documents for Ship Cost Reduction

Study Guide

Modify NVR Part 8 Relative to MIL-STD-1689A and NAVSEA S9074-AR-GIB-010/278 Fabrication Documents

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Documents for Ship Cost Reduction

- Initiative by RADM McCoy (NAVSEA 05)
- “Ships cost too much!”
- Effort supports the 313 ship goal and is backed by the CNO
- We don’t know the cost of our specs and standards
- “Find stuff we no longer need or no longer can afford”
- We don’t know the cost of our specs and standards
- Need to establish facts on
 - Design and production costs (including training and qualification)
 - Test and inspection costs
- Eliminate future costs and gain savings on current contracts
- “Walk the deck plates”
- Start with “Top 10”
- More efforts will follow these in FY-09

DSCR – “Top Ten” (7 Study Guides)

- MIL-S-901 Shock Technical Area
- MIL-STD-167 Vibration Technical Area
- MIL-STD-740 Airborne- and Structure-Borne Noise
- **Modify NVR Part 8 Relative to MIL-STD-1689 and MIL-STD-278 Fabrication Requirements**
- MIL-M-17060 Motors, 60 Cycle, Alternating Current, Integral HP, Shipboard Use
- MIL-STD-777 Schedule of Piping, Valves, Fittings and Associated Piping Components for Naval Surface Ships
- MIL-DTL-16036 Switchgear, Power, Low Voltage, Naval Shipboard in conjunction with use of MIL-Spec circuit breakers (MIL-C-17587, MIL-C-17361)
- MIL-STD-461E - Electromagnetic Interference (EMI)
- MIL-STD 464A – Electromagnetic Environmental Effects (E3) Requirements for Systems
- NTIA “Red Book” (Radar Interface Specifications)

NSRP Specification Cost Definitions

- **Spec content**
 - Is specification content **reasonable/appropriate?**
- **Spec invocation**
 - Specification content is reasonable, but not appropriate for non-critical **applications**
- **Spec interpretation**
 - Specification is appropriate, but **interpretation /enforcement** practices add unnecessary cost.

Process Roadmap

	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Submit Initial Potential Revisions	▲												
Tech Review & Down Select		▲		△							▲ Actual Completion ▲ Planned Start △ Planned Completion ▲ Deliverable/Milestone		
Additional Submissions		▲	△										
				▲	△								
					▲								
Detailed Tech/Cost Evaluations					▲		△						
							▲						
Revise Requirements								▲	△				
								▲	△				
Tech Review, Cost Analysis, Risk Assess.								▲	△				
										▲	△		
SEA 05P24 Review and Comment											▲	△	
												▲	△
PMS and SEA 05D Review												▲	△
													▲
Submit Req'ts to ABS for NVR Revision													▲

1. Monthly project telecons will be held to update status
 2. The following shipbuilders will be asked to participate: EB, BIW, NASSCO, Newport News, Ingalls, Avondale, Austal, Marinette Marine

General Questions for Shipbuilders

For a given requirement:

1. Which labor centers are affected by the requirement?
2. Does the requirement add value to assurance of sound welds/fabrications?
3. Is the requirement worth the cost of implementation?
4. Does the requirement add unnecessary work?
5. Is the requirement commensurate with the criticality of the system upon which it is imposed?
6. Does the requirement constrain innovation or flexible work practices of an activity to cost effectively fabricate systems and components?

For a given requirements change that affects processes, quantify the cost impact on:

7. Redesign
8. Installation costs.
9. Testing / qualification costs.
10. Recordkeeping
11. Other costs.(specify).

For a given requirements change that affects a specific component, quantify the cost impact to the OEM for

12. The redesign costs of such a change.
13. The qualification costs of such a change.
14. Cost/price of the component?
15. What is total cost of the requirements change (Derived from questions 7-14)?
16. What is the cost savings of the requirements change compared to the current process/component?
17. What is the risk of imposing the requirements change?

NSRP Shipbuilder White Paper

- **Specification content, invocation, and interpretation**
- **Documents**
 - All welding specifications - 1
 - MIL-STD-1689 (NVR 8.3.02 version) - 6
 - NAVSEA S9074-AR-GIB-010/278 – 15
 - NVR 8.3.02 version / 8.3.5 – 2
 - NAVSEA S9074-AO-GIB-010/248 – 11
 - NAVSEA T9074-AS-GIB-010/271 – 3
- **Issues and recommendations/alternatives**
- **Risk difficult to quantify**
 - Higher risk for testing, temperature, and material requirements
 - Less risk for training and documentation changes

Risk assessment / cost study will be important