



NATIONAL SHIPBUILDING RESEARCH PROGRAM

ADVANCED SHIPBUILDING ENTERPRISE

Reducing Naval Ship Construction & Repair Costs

Surface Preparation and Coatings

Stephen Cogswell – BAE Southeast Shipyards - Chair

Judie Blakey- NASSCO – Vice Chair

November 2 & 3, 2010

Providence, RI



NATIONAL SHIPBUILDING RESEARCH PROGRAM



Anti Trust Rules

- Regarding your company's and/or your competitors' products and services
 - Do not discuss current or future prices.
 - Do not discuss any increase or decrease in price.
 - Do not discuss standardizing or stabilizing prices.
 - Do not discuss controlling sales or allocating markets for any product.
 - Do not discuss future design or marketing strategies.
- Regarding your company's and/or your competitors' selection of their supplier companies:
 - Do not discuss refusing to deal with a company because of its pricing or distribution practices.
 - Do not discuss strategies or plans to award business or remove business from a specific company.
- Regarding your company's and/or competitors' trade secrets:
 - Do not discuss trade secrets or confidential information of your company or any other participant.



Meeting Objectives

- **Provide updates on NSRP SPC activities and Panel Projects**
 - Current projects
 - Recommended Projects
 - Related Programs (ManTech, SBIR, Paint CoE)
- **Explore the Cost and Value of QA for surface preparation and coatings**
 - Presentations regarding NAVSEA, MSC, USCG, and IMO approaches
 - Workshop discussion
- **Visit GD-Quonset Point to see how they have reduced costs associated with surface preparation and painting**



NSRP SPC Representatives

BAE Systems SSYI – Steve Cogswell

Bender - J. W Napper

Bath Iron Works – Bob Cloutier/Pete Lockwood

GD Electric Boat – Mark Panosky/F. Glynn/Skip Castro

CWP/Naval Shipyards – Charlie Simmons/Pat Rupert

NG Ingalls/ Avondale – Steve Smoak/Jay Pertuit

NASSCO - Judie Blakey

NG Newport News – Arcino Quiero

Todd Pacific – Mark Edmonds

Fincantieri Marine Group- Bob Watkins

VT Halter Marine-

Bollinger Shipyards-

Panel Chair – Steve Cogswell- BAE Systems Southeast Shipyards

Panel Vice-Chair – Judie Blakey - NASSCO

NAVSEA 05P23 – Mark Ingle



NATIONAL SHIPBUILDING RESEARCH PROGRAM



Panel Project Highlights and Success Stories

- During the past 3 years worked with the Navy to make 36 changes to the Navy Standard Item for painting
 - Several supported with data generated by Panel Projects
- Completed four projects which will reduce the cost of painting for the Navy
 - Retention of Pre -Construction Primer (PCP)
 - Fast Track Implementation of Single Coat System
 - Review of Acceptable Flash Rusting for Ship Coatings
 - Assessing the need for 50% Relative Humidity during Tank Painting
- Published a guide for evaluating flash rust which is becoming an industry standard



2011 Panel Project Scoring

White Paper Title (Participants)	Program Funds	SCORE
Evaluation of “Spot and Sweep” Blasting as a Cost Effective method of Underwater and Outer Hull Surface Preparation (Chariot Robotics, Elzly Tech BAE Systems)	\$95,500	34
Compatibility of “Single Coat” Tank Coatings with Retained Pre-construction Primer (Elzly, Nassco, BAE)	\$99,829	37
Cost Reduction of Surface Preparation in the Shipyard with Laser Ablation Featuring the New Technology of Closed-Loop Control (TODD, GLC)	\$96,638	56
Reducing the Impact of Touch-up and Rework of Surface Preparation and Coating (Nassco, Todd, Safinah, Elzly)	\$98,998	57
Closed Loop Deck Profiler (Northrop Grumman Shipbuilding with subcontract to NLB Corporation)	\$100,000	59
Optimize the Synergy and Benefits of the Quality Management Systems Approach of the Private Shipyards with NAVY Quality Management System (Metro Mach, Fat Squirel, BAE Systems, SSPC)	\$75,000	60
Complete Update of the Navy Basic Paint Inspector (NBPI) Training and Certification Program (G. Kuljian, Elzly, BAE)	\$74,300	63
Preparation for the Evaluation of the Motion Assisted Environmental Enclosure (CTC , Nortx LLC, BAE Systems)	\$99,400	64
Integration of Commercial Paperless Preservation QA Systems with the Navy CQATK (NST Center, Elzly, BAE Systems)	\$95,100	64
Improving Craft Workers Through the Use of Job Instruction (JI), Job Methods (JM), and Job Relations (JR) (NGNN, Alaska Ship & Drydock)	\$93,500	66
Study to Investigate the Effectiveness of Simulator Enhanced Training for Abrasive Blasters and Airless Spray Painters in the Marine Coatings Industry (NGNN)	\$99,000	68
Mobile High Reach Surface Preparation and Coatings Application System (Visions East, BAE Systems)	\$99,400	71
Insertable Stalk Imaging System (ISIS) Tank Inspection for New Builds (NGNN)	\$100,000	84
Handheld FTIR for Surface Characterization (NGNN, CTC)	\$99,228	86
Coating Integrity Extension Using Bulb Flat Construction (Marinette)	\$99,789	91



NATIONAL SHIPBUILDING RESEARCH PROGRAM



Recommended 2011 Panel Projects

- Evaluation of “Spot and Sweep” Blasting as a Cost-effective Method of Underwater and Outer Hull Surface Preparation
 - Chariot Robotics, BAE Systems & Elzly Technology
- Compatibility of “Single Coat” Tank Coatings with Retained Pre-construction Primer
 - Elzly Technology, NASSCO & BAE Systems
- Cost Reduction of Surface Preparation in the Shipyard with Laser Ablation Featuring the New Technology of Closed-Loop Control
 - Todd & GLC



Meetings & Events

- Upcoming NSRP SPC Meetings
 - February 3, 2010 – Las Vegas (w/SSPC)
 - Summer – TBD (recommendations?)
- Other Meetings
 - November 3-5, 2010 – SNAME 2010 Annual Meeting and Expo Bellevue, WA
 - January 31 – February 3, 2011 – SSPC, Las Vegas, NV
 - March 13-17, 2011 – CORROSION 2011 , Houston, TX
 - Mid May – ACA Marine Coatings (VA Beach)
 - June 6-9, 2011 – Mega Rust 2011, Norfolk, VA
 - Late July - SSRAC
 - July 31 - August 5, 2011 – DoD Corrosion Conference 2011, Palm Springs, CA



Why Does it Work? PARTICIPATION!

We all have DAY JOBS. Thanks to all who have participated!

- A diverse group of participants made for very productive meetings
 - NSRP yards
 - NAVSEA 05P23, RMC's and Public SY's
 - Private Shipyards
 - Academia
 - Vendors
- All stakeholders are participating, resulting in a very productive year. We must continue to collaborate and move forward.



NATIONAL SHIPBUILDING RESEARCH PROGRAM



For More Information

www.nsrp.org

There is much more to NSRP than Surface Preparation and Coatings. Program info, research announcements, briefings, project descriptions ... However if you want to see where we have been and where we are headed check the Panel web site, home page, Ship Production Panels. It is all there.

*ALL PANELS SUPPORT:
Quality, TOC, Green initiatives*



NATIONAL SHIPBUILDING RESEARCH PROGRAM



Questions?



NATIONAL SHIPBUILDING RESEARCH PROGRAM

