



NATIONAL SHIPBUILDING RESEARCH PROGRAM

ADVANCED SHIPBUILDING ENTERPRISE

Reducing Naval Ship Construction & Repair Costs

Program Update

Joint Panel Meeting

Shipyard Production Process Technologies

Business Process Technologies

Systems Technology

Program Operations

- New NAVSEA Program Mgr: Connie Bowling
- Joint Funding Agreement (contract between ECB and NAVSEA) extended through Aug 2014
- \$15M/yr funding for FY10 and FY11 – sources:
 - PEOs (Ships, Subs, Carriers)
 - NAVSEA 05
 - FY10 Defense Appropriations Bill ... *maybe*
- New round of Panel Projects
- Research Announcement released 12 Oct



Research Announcement 08-01

- New this solicitation cycle: mandatory submission of abstracts in order to submit proposals
 - Abstracts were due 12 Nov
 - Shared with PEO staffs for info, optional comment
 - NSRP staff feedback sent to all submitters
- Proposals due 12 Feb
- Blue Ribbon Panel week of 29 Mar
- Project Selection 21-22 Apr



Panel Project Whitepapers

- 25 whitepapers from 10 panels received by 30 Oct deadline
- Panel Chairs to present proposals at 26 or 27 Jan ECB Selection Meeting
- Number selected will depend on amount of funding available, currently ~\$600K
- Worthy projects not selected will likely be placed on standby list



Standby Panel Projects

The following projects are now on contract –
this brings current panel project total to 12

| Project | Panel | Amount |
|---|----------------------------|-----------|
| Pilot Tool for Linking Ship Design to Shipyard Simulation | Shipyard Production | \$98,813 |
| Comparison of SAW and Tandem Electrode Gas Shielded Processes for Productivity and Distortion in Thin Panel Butt Joints for Thin Panel Structures | Welding | \$100,000 |
| Cost-Effective Specifications and Requirements Definition | Product Design & Materials | \$100,000 |



Other Initiatives

- Open Architecture Ship Interface Standards (OASIS)
- Specifications Review
aka 'Documents for Ship Cost Reduction' (DSCR)
- Strategic Investment Plan Update



Open Architecture Ship Interface Standards (OASIS)

- Navy/Industry Working Group has met monthly
- Focus continues on development of Roadmap
- Final Roadmap delivery to Navy slated for this month
- *more on this later*



Specifications Review

Documents for Ship Cost Reduction (DSCR)

History

- Came about as a result of the NAVSEA strategic planning process and industry inquiry
- Spring 2008 – NAVSEA Tech Warrant Holders identified ~140 cost driving requirements
- Asked shipyards, thru NSRP, to ID which could be cut or amended ... & assessment of cost impact
- Solicited similar info from Marine Machinery Assn
- Analysis of input led to “Top 10 List” for initial effort

“Find stuff we no longer need or can no longer afford”

Specifications Review

DSCR Top 10

- MIL-STD-777 Schedule of **Piping**, Valves, Fittings & Associated Piping Components for Naval Surface Ships
- Naval Vessel Rules Part 8 relative to MIL-STD-1689 and MIL-STD-278 **Fabrication Welding** and Inspection of Ships Structure
- MIL-M-17060 **Motors**, 60 Cycle, Alternating Current, Integral HP, Shipboard Use
- 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-167 **Vibration** Technical Area
- MIL-STD-740 Airborne and Structure Borne **Noise**
- MIL-STD-461E Electromagnetic Interference (**EMI**)
- MIL-STD 464A **Electromagnetic Environmental Effects** (E3) Requirements for Systems
- MIL-STD-469B / National Telecommunications Information Administration (NTIA) Chapter 5 **Radar** Engineering Interface Requirements, Electromagnetic Compatibility – Frequency Spectrum Guide for Radar
- MIL-S-901 **Shock** Technical Area

Specifications Review

Documents for Ship Cost Reduction (DSCR)

- Navy analysis complete on 3 specs ... asked NSRP to review proposed changes, respond w/ assessment of cost impact:
 - MIL-STD-777 (piping & valves)
 - MIL-DTL-17060 (60Hz, AC motors)
 - MIL-STD-1689 / Tech. Pub 278 (welding)
- Responses to Navy to be sent in Jan
- New commonality initiative – “Virtual Shelf” – also being reviewed for impact



Strategic Investment Plan Update

- Last comprehensive update was 2004 – 2005
- ECB stated initial intent to undertake new update at Oct meeting ... will give final approval of process and budget at Jan meeting
- Major Initiative Team Leads, Panel Chairs to form SIP Update Working Group
- Tentative initial sked: Kickoff meeting late Feb, workshop early May



Recent Meetings & Events

| Dates | Event | Comments |
|--------------|--|---------------|
| Oct 21-23 | SNAME Annual Meeting & Expo / Ship Production Symposium <i>Providence, RI</i> | Conference |
| Nov 18-19 | Facilities, Tooling & Risk Management <i>San Diego, CA</i> | Panel Meeting |
| Nov 18-19 | Electrical Technologies <i>Philadelphia, PA</i> | Panel Meeting |
| Nov 30-Dec 3 | Defense Manufacturing Conference <i>Orlando, FL</i> | Conference |



Upcoming Meetings & Events

| Dates | Event | Comments |
|-----------------|--|---------------|
| Jan 26, 2010 | NSRP ECB Meeting <i>Washington DC</i> | Meeting |
| Feb 10-12 | Environmental Technologies <i>New Orleans, LA</i> | Panel Meeting |
| Feb 24-26 | Surface Preparation and Coatings <i>San Diego, CA</i> | Panel Meeting |
| Mar 10-11, 2010 | ShipTech <i>Biloxi, MS</i> | Conference |



For More Information

The screenshot shows the homepage of the National Shipbuilding Research Program (NSRP). At the top, it features the program's logo and the tagline "Reducing Naval Ship Construction & Repair Costs". Below this is a navigation menu with links for Home, About Us, Project Information, Ship Production Panels, Events, Industry Initiatives, Key Downloads, Links, and Contact Us. A "Quick Links" section includes Solicitations, Small Business Opportunities, New Product Data Initiative, Project Information Requests, and Strike Up/Strike Down. An "Updates" section lists New Program Information and Project Book 2008. A "Major Program Initiatives" section is visible at the bottom, with sub-sections for Shipyard Production Processes, Systems Technology, Business Process Technologies, Product Design & Materials Technology, Facilities, Tooling & Risk Management, and Crosscut Initiatives. A central video player displays a "Portable Automated Bulkhead Straightener Demo a Success...more". To the left of the video, a "Research Announcement Released" section highlights "NSRP ASE Solicitation Information" and states "ABSTRACT SUBMISSION IS NOW CLOSED".

www.nsrp.org

NEWLY ARRIVED...

- A new video section on the home page
- Currently featuring short videos on the Climbing Robot Welder & the Portable Automated Bulkhead Straightener

COMING SOON...the NSRP website is joining the blogosphere!

- Links off the home page to 6 blog sites
- One for each Major Initiative
- Users can post commentary, event descriptions, other relevant materials
- Additional avenues for tech transfer & networking



Questions?

