



NATIONAL SHIPBUILDING RESEARCH PROGRAM
ADVANCED SHIPBUILDING ENTERPRISE

Reducing Naval Ship Construction & Repair Costs

Program Update

Facilities, Tooling & Risk Management

Bath, ME

May 19-20, 2010

Navy Program Office

- NAVSEA Program Mgr Connie Bowling and her team came on board last fall – several initiatives have resulted



Funding

- \$15M/yr funding (before “taxes”) for FY10 and FY11 – sources:
 - PEOs (Ships, Subs, Carriers)
 - NAVSEA 05
 - FY10 Defense Appropriations Bill



Projects

- 15 panel projects were selected at the January ECB meeting – total portfolio award \$1.2M. Most of the teams have begun work on their respective projects.
- 16th project --“Best of the Best” Practices in Shipyard Workers’ Compensation Programs -- submitted by FTRM panel was placed on standby – now out to the ECB for a go/no-go decision
(NOTE: this was selected and awarded funding by the ECB post-panel meeting)



2010 Panel Project Portfolio

2010 NSRP Panel Project Info

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Business Process Technologies	ENTERPRISE RESOURCE PLANNING	VT Halter	NGSB - Gulf Coast, ShipConstructor USA	12	\$99,600

Major Initiative:

Business Process Technologies

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Crosscut Initiatives	IMPROVING GOSHIRS.COM	Alaska Ship and Drydock		12	\$52,000

Major Initiative:

Crosscut Initiatives

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Electrical Technologies	SOLID-STATE SHIP LIGHTING EVALUATION	NGSB-GC	NGSB-GC, NAVSEA, Omni Technologies, LightPod, Integrated Illuminated Sytems	9	\$101,148

Major Initiative:

Shipyard Production Process Technologies

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Electrical Technologies	CABLE TAG REDUCTION	BIW	BIW, NASSCO, NGSB-NN, NGSB-GC	12	\$55,595

Major Initiative:

Shipyard Production Process Technologies

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Electrical Technologies	FIBER OPTIC TESTER	NGSB-NN	NGSB-NN, NGSB-GC, Kitco, JDSU, NSWCCD, BIW	10	\$100,000

Major Initiative:

Shipyard Production Process Technologies

Tuesday, May 25, 2010

Page 1



2010 Panel Project Portfolio (cont)

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Environmental Technologies	IMPLEMENTATION of EMISSIONS FACTORS	CTC	Concurrent Technologies Corporation, BAE Systems San Diego Ship Repair	12	\$98,956

Major Initiative:

Facilities, Tooling & Risk Management

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Facilities, Tooling & Risk Management	INJURIES & FATALITIES in "STRUCK" INCIDENTS	Terry Preston/EHS Made Easy	Atlantic Marine; Electric Boat; NASSCO; Norfolk Naval Shipyard; NGSB-GC	7	\$23,000

Major Initiative:

Facilities, Tooling & Risk Management

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Product Design & Material Technologies	IMPLEMENTATION of NVR CRITERIA into MAESTRO	DRS Defense Solutions	BIW, ABS, NGSB-GC(Avondale), NSWC-Carderock	12	\$100,000

Major Initiative:

Product Design & Material Technologies

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Product Design & Material Technologies	SWAGE PANEL ANALYSIS VERIFICATION	NASSCO	Noran Engineering, BMT Scientific Marine Services	10	\$99,215

Major Initiative:

Product Design & Material Technologies

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Shipyard Production Process Technologies	SAFE RIGGING EQUIPMENT PRACTICES	NASSCO		8	\$68,168

Major Initiative:

Shipyard Production Process Technologies

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Surface Preparation & Coatings	SALT MITIGATION STUDY	Fat Squirrel	Pete Ault, Elzly	12	\$79,595

Major Initiative:

Shipyard Production Process Technologies

Tuesday, May 25, 2010

Page 2



2010 Panel Project Portfolio (cont)

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Surface Preparation & Coatings	COST of NAVY COATING QA/QC	Atlantic Marine	Global Inspection Group	12	\$79,900

Major Initiative:

Shipyards Production Process Technologies

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Surface Preparation & Coatings	ALTERNATIVE COATINGS ENVIRONMENTAL RECORDER	NGSB-NN		12	\$78,322

Major Initiative:

Shipyards Production Process Technologies

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Welding Technology	HYBRID LASER ARC STUDY	Bollinger	NGSB-Gulf Coast, Penn State ARL	9	\$84,740

Major Initiative:

Shipyards Production Process Technologies

Panel	Project Name	Lead	Team Members	Duration (months)	Program Funds Contracted
Welding Technology	PORTABLE STIR FRICTION WELDING SYSTEM	Engineering Consulting Services (ECS)	Wichita State University	9	\$99,960

Major Initiative:

Shipyards Production Process Technologies

Total: \$ 1,220,199

Tuesday, May 25, 2010

Page 3



Project Information *(cont)*

- ECB awarded \$16M for 8 Major Initiative projects
- All are in the final pre-agreement phase – finalizing Statements of Work, milestone schedules, and scheduling kickoff meetings



2010 Major Initiative Projects

Weld Shrinkage and Distortion Allowance Data Model for Neat Construction Ship Design Engineering

Prime	Team Members	MI Area	Program Funds	
Bollinger Shipyards	Northrop Grumman Shipbuilding-Gulf Coast; ShipConstructor USA; Todd Pacific; Gatekey Engineering; Marinette Marine Corp; Edison Welding Insitute; Hepinstall Consulting Group; Victoria Dlugokecki	Shipyards Production Process Technologies	Cost Share	\$1,900,000 \$1,900,000

Common Parts Catalog (CPC) Enhancements

Prime	Team Members	MI Area	Program Funds	
Electric Boat	Northrop Grumman Shipbuilding-Gulf Coast; Bath Iron Works	Product Design & Material Technology	Cost Share	\$2,018,497 \$2,018,497

Streamlining Shipyard Rigging Analysis

Prime	Team Members	MI Area	Program Funds	
NASSCO		Shipyards Production Process Technologies	Cost Share	\$378,186 \$378,186

Large Scale Computer Simulation Modeling System Enhancements

Prime	Team Members	MI Area	Program Funds	
NASSCO	TranSystems, Inc.; Atlantec ES; Penn State/ARL	Shipyards Production Process Technologies	Cost Share	\$1,073,613 \$909,015

Enterprise Resource Planning (ERP) Integration with CAD

Prime	Team Members	MI Area	Program Funds	
VT Halter Marine, Inc.	Austal USA; Todd Pacific; Bollinger Shipyards; Marinette Marine, Inc.; Northrop Grumman Shipbuilding-Gulf Coast; Praeses, LLC; Jerry Pittman and Associates; ShipConstructor USA	Business Process Technologies	Cost Share	\$686,432 \$709,570

Process Oriented Visual Planning Tool (POV Planner)

Prime	Team Members	MI Area	Program Funds	
Todd Pacific Shipyards Corp.	Knowledge Based Systems, Inc. (KBSI); First Marine International (FMI); Autodesk, Inc.; Praeses, Inc.; Bollinger Shipyards; Northrop Grumman Shipbuilding-Gulf Coast	Shipyards Production Process Technologies	Cost Share	\$432,272 \$436,100

Intregrated Logistics Environment (ILE)

Prime	Team Members	MI Area	Program Funds	
Electric Boat	Northrop Grumman Shipbuilding-Gulf Coast; Product Data Services Corp.	Systems Technology	Cost Share	\$1,200,000 \$1,200,000

Advanced Systems Development of the Remote Climbing Robot

Prime	Team Members	MI Area	Program Funds	
Robotics Technologies of Tennessee	Northrop Grumman Shipbuilding-Gulf Coast; Bath Iron Works; Tennessee Technological University	Shipyards Production Process Technologies	Cost Share	\$198,162 \$198,162



Other Initiatives



Specifications Review

Documents for Ship Cost Reduction (DSCR)

- NSRP working with NAVSEA to ID and review specification changes that will reduce cost without impacting quality
- Initiative started in Summer 2008 with a down-select from 140 spec candidates
- Initial list of 10 are currently being worked / implemented

***“Find stuff the industry no longer needs
or can no longer afford”***



Specifications Review

Documents for Ship Cost Reduction (DSCR)

- NSRP has conducted assessment of cost impact to proposed changes for:
 - MIL-STD-777 (piping & valves)
 - MIL-DTL-17060 (60Hz, AC motors)
 - MIL-STD-1689 / Tech. Pub 278 (welding)
 - Virtual Shelf (Commonality)
 - MIL-STD-167-1A (mechanical vibration)
 - Shock Testing requirements
 - Use of software tool for identifying EMI testing reqts



Specifications Review

Documents for Ship Cost Reduction (DSCR)

- Expecting more requests from NAVSEA at the next ECB meeting
- Shipyards can also draft a change proposal and submit through the review process



Strategic Investment Plan 2010

- SIP 2010 Working Group comprised of Major Initiative Leads, Panel Chairs and Navy reps
- ECB and Navy provided guidance on direction and focus of SIP 2010
- Next steps:
 - Working Group to review ECB/Navy guidance and offer comments and perspective, which will be compiled into a working document and briefed at the next ECB meeting



Benchmarking

- Last done in 2005 & 2006 by First Marine International
- Both industry and Navy are interested in another round to highlight changes in last 5 years
- First Marine International has been asked for a cost estimate
- Anticipate ECB will decide once funding picture becomes clearer



Panel Meetings

- NAVSEA and NSRP looking into ways to make the 'Panel Forum' more successful
- Desire is to achieve:
 - Greater participation from industry and Navy
 - Robust agendas covering active projects, potential initiatives, discussions on hot issues
 - Increased collaboration on industry and Navy interest areas
- Some ideas:
 - More joint venues, perhaps aligned to current topics/initiatives
 - Virtual attendance options (WebEx, GoToMeeting, etc.)

Your ideas are welcome...

NATIONAL SHIPBUILDING RESEARCH PROGRAM



Panel Projects – New Round

- No ECB decision on a new panel project whitepaper solicitation yet, but
- Given the projected funding situation, it seems more likely than not there will be one—*perhaps* on roughly the same timeline as last year
- Meaning: it's not too early to be considering new topics



Major Initiative Team Leads Line-up

National Shipbuilding Research Program
MAJOR INITIATIVE TEAM LINEUP - Updated 5/18/10

	Shipyards Production Process Technologies	Business Process Technologies	Product Design & Material Technologies	Systems Technology	Facilities, Tooling & Risk Management	Crosscut Initiatives
MI Team Lead	Shawn Wilkerson (NGSB-GC) 1/1/11	Scott Mullen (BIW) 1/1/11	Barry Espeseth (EB) 1/1/11	Ron Wood (NGSB-GC) 1/1/11	Lane Folkers (NGSB-GC) 7/1/11	Dick Boutwell (NGSB-NN) 1/1/11
MI Assistant Team Lead	Thurston Gore (NGSB-NN) 1/1/11	James Turner (VT Halter) 01/1/11	John Walks (NGSB-GC) 01/1/11	Greg Morea (EB) 01/1/11	Vacant	Jerold Shepherd (VT Halter) 7/1/10
Extended MI Team	Mike Wade (NSWC)	Jack White (Altarum Institute)	Richard Storch (U. of Wash.)		Steven Lacoste (NGSB-GC) Will Lannes (UNO) Anthony Start (PSNSY)	
Panel Officers	Shipyards Production Process Technologies	Business Process Technologies	Product Design & Materials Technologies	Systems Technology	Facilities, Tooling & Risk Management	Crosscut
	<i>Chair:</i> Tonya Boney (NGSB-GC) 1/1/11 <i>VChair:</i> Shawn Wilber (Austal) 1/1/11	<i>Chair:</i> Ken Clarke (NGSB-NN) 12/31/11 <i>VChair:</i> Pat Roberts (ShipConstructor) 12/31/11	<i>Chair:</i> Dave Wood (NGSB-Gulf Coast) 1/1/11 <i>VChair:</i> John Malone (Consultant) 02/14/12	<i>Chair:</i> Burt Gischner (EB) 1/1/11 <i>VChair:</i> Gerald Radack (Concurrent Tech) 1/1/11	<i>Chair:</i> Jack Shea (EB) 07/1/10 <i>Workers Comp Cmte:</i> Angella Thompson (Todd) 06/01/11; Louise Holleran (NASSCO) 06/1/11 <i>Safety & Health Adv Cmte</i> Yaniv Zagagi (Atlantic) 07/1/10; Dan Nadeau (BIW) 07/1/10 <i>F&T Committee:</i> Robert Santos (EB) 06/1/12	<i>Chair:</i> Larry Gebhardt (Alaska Ship) 10/1/10 <i>VChair:</i> Don Bewley (Alaska Ship) 10/1/10
	Surface Preparation & Coatings					
	<i>Chair:</i> Steve Cogswell (Atlantic) 11/1/11 <i>VChair:</i> Judie Blakey (NASSCO) 11/1/11					
	Welding Technology					
	<i>Chair:</i> Lee Kvidahl (NGSB-GC) 1/01/11 <i>VChair:</i> Mike Sullivan (NASSCO) 2/15/12					
	Electrical Technologies					
<i>Chair:</i> Gary Zimak (NGSB-NN) 2/1/11 <i>VChair:</i> Erik Bjorkner (NGSB-GC) 2/1/11						
PTRs	Thurston Gore (NGSB-NN) Lee Kvidahl (NGSB-GC) Shawn Wilkerson (NGSB-GC)	Gerri Redmond (BIW) Ken Clarke (NGSB-NN) Scott Mullen (BIW)	Barry Espeseth (EB) John Walks (NGSB-GC) Bill Brill (Consultant)	Bob Schaffran (Consultant) Greg Morea (EB) Doug Martin (Consultant)	Lane Folkers (NGSB-GC)	



Recent Meetings & Events

Dates	Event	Comments
Mar 10-11	ShipTech <i>Biloxi, MS</i>	Conference
Mar 10	Large Scale Computer Simulation Modeling <i>Biloxi, MS</i>	Workshop/ Demo
Mar 10-11	Product Design & Material Technologies <i>Biloxi, MS</i>	Panel Meeting
Mar 10-11	Electrical Technologies <i>Biloxi, MS</i>	Panel Meeting
Mar 11-12	Crosscut Initiatives <i>New Orleans, LA</i>	Panel Meeting
Apr 7-8	Welding Technology <i>South Padre Island, TX</i>	Panel Meeting
Apr 8-9	ASNE Day <i>Arlington, VA</i>	Conference
Apr 13-15	NDIA 11 th Annual and Engineering Technology Conference/DoD Tech Expo <i>Charleston, SC</i>	Conference



Upcoming Meetings & Events

Dates	Event	Comments
June 7-10	Mega Rust 2010: Navy Corrosion Conference <i>San Diego, CA</i>	Conference
June 15-16	Product Design and Materials Technologies <i>Pittsburgh, PA</i>	Panel Meeting
June 22-23	Environmental Technologies <i>Portland, OR</i>	Panel Meeting
June 28-29	Electrical Technologies <i>Philadelphia, PA</i>	Panel Meeting
August 4-5	Crosscut Initiatives <i>Seattle, WA</i>	Panel Meeting
August 24-26	Surface Preparation and Coatings <i>Ketchikan, AK</i>	Panel Meeting



For More Information

NSRP AS E NATIONAL SHIPBUILDING RESEARCH PROGRAM
ADVANCED SHIPBUILDING ENTERPRISE
Reducing Naval Ship Construction & Repair Costs

Program Information Projects Ship Production Panels Industry Initiatives Solicitation

RECENT VIDEOS Gallery

Remote Climbing Robot for Automated Welding Processes
Team continues refinement of the mobile welding

Portable Automated Bulkhead and Hull Straightener
The focus of this project expanded existing

Previous Screen Screen 1 of 1 Next Screen

Applications for Design for Production software released

Evaluate Career Website To Increase Talent Pipeline For Future Of Shipbuilding And Repair Industry
www.Goships.com Survey
[Press Release](#) [Goships.com Brochure](#)

TECHNOLOGY TRANSFER

[Facilities, Tooling & Risk Management Panel Meeting \(Joint Safety & Health Advisory and Worker's Compensation Committees\)](#)
May 19-20, 2010
Portland, ME

[Ship Production Panels/product design meetings.](#)

PROJECT SELECTION PRESS RELEASE

NSNAME SHIP PRODUCTION SYMPOSIUM CALL FOR PAPERS
NSRP PROJECT BOOK
NEWS BULLETIN

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NEW HOMEPAGE DESIGN...

- Page for each Major Initiative
- New menu layout

NSRP has joined 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

NSRP Major Initiatives Blog Site

HOME HOW TO USE THE NSRP MAJOR INITIATIVE BLOG SITE RETURN TO NSRP WEBSITE FEED

Search

MAJOR INITIATIVES BLOGS

Business Process Technologies (1)
Crosscut Initiatives (1)
Facilities, Tooling & Risk Management (1)
Product Design & Material Technologies (1)
Shipyard Production Process Technologies (1)
Systems Technology (1)

HOW-TO WEBPAGES

How to Use the NSRP Major Initiative Blog Site
Return to NSRP Website

Instructions:

1. Select a blog (listed on the left toolbar).
2. Read posting of interest
3. Post comment by selecting "Comments" Link.
4. The comment will be sent to the NSRP Administrator for approval.
5. Once approved, the comment will be displayed underneath the blog.

If you have questions, please contact the NSRP Administrator at (843) 760-3334 or at nsrp@aticorp.org

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ADMINISTRATOR FUNCTIONS

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NATIONAL SHIPBUILDING RESEARCH PROGRAM

Questions?

