



# **Ship Design & Material Technologies Major Initiative Team Lead (MITL) 2nd Quarter '11 Report**

**Barry Espeseth, SDMT MITL (until 7/29/11)**

**John Walks, SDMT MITL (after 7/29/11)**

**Dave Rice, SDMT Asst MITL**

**June 22, 2011**

# John Walks has been voted into the SDMT MITL position by the ECB



- **Employed in Engineering at Ingalls since 1991**
- **Panel Chairman of PDMT Panel from 2001-2004**
- **Assistant MITL of PDMT (now SDMT) 2007-2010**
- **MITL “At-Large” 2011**
- **Overseer of “all things NSRP” at Ingalls**

# MITL Objectives actively support the NSRP ASE Strategic Investment Plan



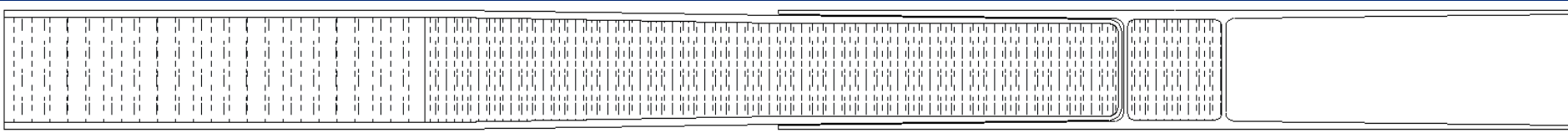
- **Ensure SDMT Projects are on schedule and deliverables support the Initiative's goals**
- **Keep the ECB informed on the SDMT activities and project status**
- **Develop and execute a plan to facilitate the development of meaningful projects for the upcoming RA that will produce identifiable ROI for the shipyards and our customers**
- **Coordinate interactions with our customers to ensure project cost savings/avoidance's are identified and tracked**
- **Update the SIP (as required) to reflect benchmarking and issued project deliverables data**
- **Act as conduit to inform shipbuilders on NSRP initiatives**

# FY09 SDMT Projects Status



## Low Cost Pultruded Composites (Pultrusions II)

- **Participants:** Ingalls (Lead), KaZak Composites, Material Sciences Corp, University of West Virginia
- **Objective:** To develop and demonstrate a affordable method of constructing large composite structures using pultruded panels & connectors.
- **PTR:** B. Espeseth
- **Status:**
  - Phase I to design connectors complete
  - Phase II to have connectors manufactures in production complete
  - Phase II testing of structures just starting

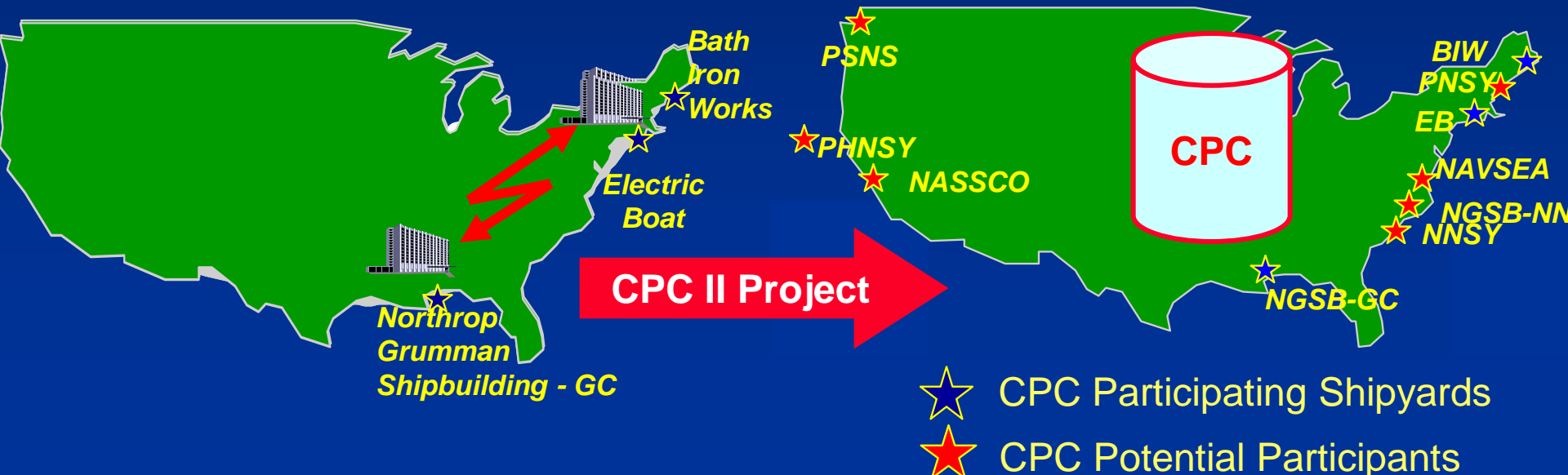


# FY10 SDMT Projects Status



## Common Part Catalog Enhancements (CPC II)

- **Participants:** Electric Boat (Lead), Ingalls, Bath Iron Works, Newport News Shipbuilding and NASSCO
- **Objective:** analyze, identify and map the implementation of marked enhancements to the existing catalog capability in the areas of:
  - Task 1 - Network, software and application changes,
  - Task 2 - Model inclusion and exchange,
  - Task 3 - Functionality enhancements and
  - Task 4 - Additional shipyard participation.
- **PTR:** B. Brill
- **Status:**
  - Electric Boat will be providing the project's latest status later this morning

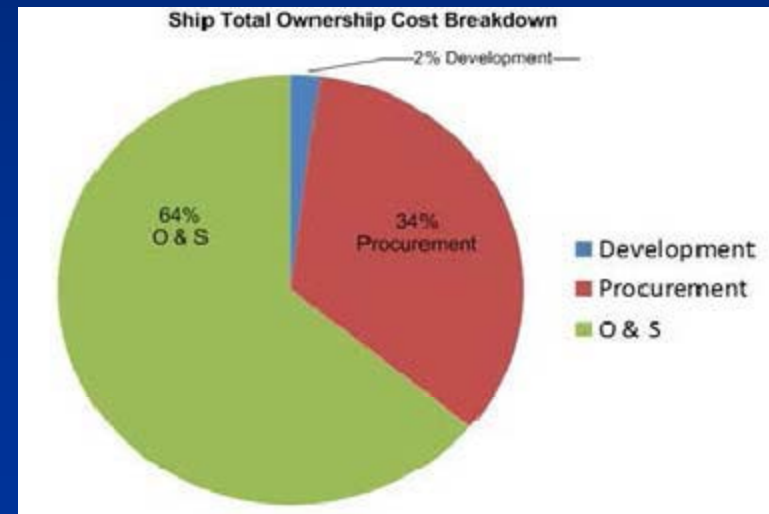




# FY11 SDMT Projects Status

## Reduction of Total Ownership Costs Through Application of Design For Maintenance and Repair Methodologies

- **Participants: Bollinger (Lead), BAE Southeast, Vigor, Trident Repair Facility Kings Bay, Electric Boat, NSWC, Matt Tedesco, Hepinstall Consulting, Vicky Dlugokecki**
- **Objectives:**
  - **Provide design solutions to lower O&S costs**
  - **Develop a DFM Manual**
  - **Develop HME repair standards**
- **PTR: John Walks**
- **Status: Kickoff held 6/1, obtaining key maintenance data from Navy in order to complete Phase 0**



# FY11 SDMT Projects Status



## Swaged Bulkhead Analysis Verification

- **Participants: NASSCO, Marinette Marine, UC San Diego**
- **Objectives:**
  - **Develop, validate by test and refine for efficiency analytical FEA methodologies that will support structural engineering/design of swage bulkheads in Ships**
  - **Test paint adherence**
- **PTR: Shawn Wilkerson**
- **Status: Kickoff held, project in progress**
- **Update on related panel project is on the agenda**



# FY11 SDMT Projects Status



## Naval Vessel Ice Capability Optimization Effort

- **Participants: NASSCO, BIW, ABS**
- **Objectives:**
  - **To develop analytical methods and templates to meet a range of Ice Capability requirements for a variety of generic ship types/classes**
  - **ABS to review and validate results**
- **PTR: Mark Debbink**
- **Status: Kickoff held, project in progress**



# Miscellaneous MITL/NSRP Items



## ● RA Process Preparation Suggestion

- **RA cycle now starting in May annually enables our panel to schedule preparation activities.**
- **SDMT needs to discuss starting specific agenda times to facilitate project brainstorming to prepare for the RA issue.**
  - » **during our 4<sup>th</sup> and 2<sup>nd</sup> quarter panel meetings.**
- **These brainstorming activities will help to ensure:**
  - » **more and higher quality SDMT projects are proposed,**
  - » **better quality business cases and levels of inter-shipyard collaboration are developed,**
  - » **more new construction and repair cost savings are provided to our customers.**

# Upcoming Meetings & Events



<u>Dates</u>	<u>Event / Location</u>	<u>Comments</u>
Aug 30-31	Fleet Maintenance & Modernization Sym San Diego, Ca.	Conference
Sept 20-21	NSRP ECB Meeting Washington DC	Panel Project Selection
Oct 4-6	All Panel Meeting Newport News, Va.	Panel Meeting
Oct 10-14	Technical Evaluation Review Panel (TERP) Charleston, S. C.	RA Process
Nov 7-11	Blue Ribbon Panel Charleston, S. C.	RA Process
Nov 16-18	SNAME Annual Mtg/Ship Prod Symposium Houston, Tx.	Conference
Dec 13-14	NSRP ECB Meeting Charleston, S. C.	RA Project Selection



Questions?