



**Product Design & Material Technologies
Major Initiative Team Lead (MITL)
1st Quarter '09 Report**

**Barry Espeseth, PDMT MITL
John Walks, PDMT Asst MITL
February 11, 2009**



MITL Objectives actively support the NSRP ASE Strategic Investment Plan

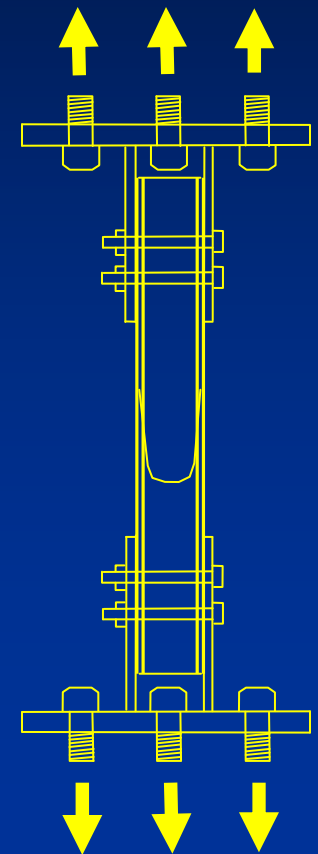
- **Ensure PDMT Projects are on schedule and deliverables support the Initiative's goals**
- **Keep the ECB informed on the PDMT activities and project status**
- **Develop and execute a plan to facilitate the development of meaningful projects for the upcoming RA that will produce identifiable ROI for 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**

FY07/08 PDMT Projects Status



1. Improved Affordability for Composite Structures (Pultrusions I)

- **Participants:** NGSS (Lead), KaZak Composites, Naval Surface Warfare Center
- **Objective:** To develop and demonstrate a low cost joining capability for flat pultruded composite panels
- **PTR:** B. Espeseth
- **Accomplishments to date:**
 - All Phase I and II tasks are complete
 - Phase III testing underway at Carderock
 - Fatigue testing: 3 point bend successful, 4 point bend in process
 - Static tension testing in process
- **Next Steps:** complete testing. Issue final report.
- **Status:** on schedule for 4/09 completion



FY07/08 PDMT Projects Status (continued)



3. Design for Producibility for Mid-Tiered Shipyards

- **Participants:** Bollinger, Todd, Atlantic, Hepinstall Consulting, Victoria Dlugokecki, P. E.
- **Objectives:**
 - Deliver a comprehensive DfP guide
 - Reduce design lead times and costs
 - Identify and utilize DfP cost reduction principles
- **PTR:** John Walks
- **Status:** on schedule and within budget
- Final DFP manual and template available by contacting NSRP
- Final workshop March 11

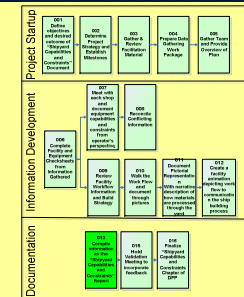
PROCESS STEP 013 Compile Information as the Shipyards Capabilities and Constraints Chapter of the DFP Manual

Purpose:

To consolidate the facility and equipment capabilities and constraints of the shipyard through "easy-to-use" summary tables and associated detailed information tables.

Desired Outcome:

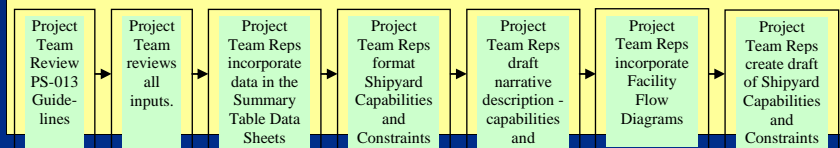
A draft of the Shipyards Capabilities and Constraints Chapter of the DFP Manual is documented.



Process Step Visual

Process Owner: Project Team Leader

Process Steps:



Inputs:

[Process Step 013 Guidelines \(A13\)](#)
[Summary Table Data Sheets \(11" x 17"\) \(A55\)](#)
[Facility Flow Diagram \(A49\)](#)
[Shop Flow Diagrams \(A50\)](#)
[Facility Flow Animation \(A54\)](#)
[Pictorial Representation of Work Flow for Shops \(A53\)](#)
 Pictorial Representation of Work Flow through Facility.
 Completed Shipyards Data Collection Work Package.
[Project Strategy Document \(A16\)](#)

Deliverables:

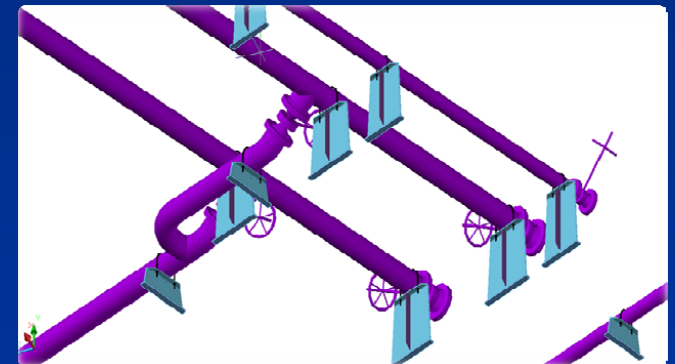
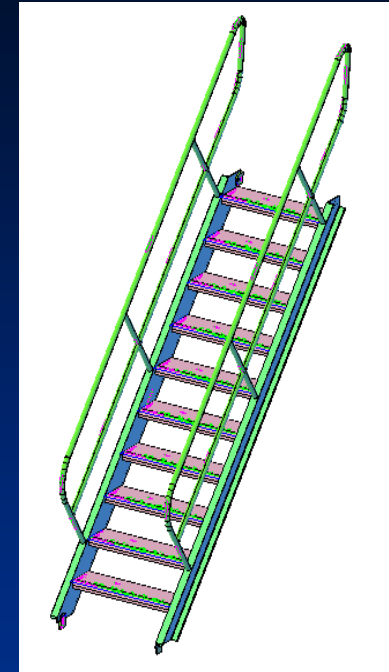
[Draft "Shipyards Capabilities and Constraints" Chapter of the DFP Manual. \(A56\)](#)

FY07/08 PDMT Projects Status (continued)



4. Practical Applications for Design for Producibility

- **Participants:** Bollinger, NGSB GC, Bender, Marinette, ShipConstructor, VT Halter, Genoa Design
- **Objectives:**
 - **Apply DfP Principles and Processes from last year's project**
 - **Develop functionality in ShipConstructor to support:**
 - **Integration of standard assemblies**
 - **Integration of distributive systems supports**
- **PTR:** John Walks
- **Status:** Draft software spec released, beta release later this year, within budget, applying for no-cost extension



Miscellaneous MITL/NSRP Items



- **ShipTech 2009**
 - 3/9-11, Biloxi, Ms. No registration fee, limited to 350 attendees
 - 20 technical presentations in relation to shipbuilding design and material topics
 - High level industry & Navy speakers concentrating on shipbuilding affordability
- **Electrical Technologies Panel**
 - New Technical Panel within NSRP to address electrical issues in design and construction
 - Will map to either SPPT or PDMT Major Initiative

Upcoming Meetings & Events



<u>Dates</u>	<u>Event / Location</u>	<u>Comments</u>
Mar 10-11	ShipTech 2009 <i>Biloxi, Ms.</i>	ONR ManTech Conference
Mar 11	Final DFP for Mid-Tiered Yards Workshop <i>Biloxi, Ms.</i>	PDMT Sponsored
Apr 8-9	ASNE Day 2009 <i>National Harbor, Md.</i>	
May 5-7	NSRP Joint Panel Meeting <i>San Diego</i>	PDMT, ST, SPPT F&T, BPT
May 20-21	ASNE Intelligent Ships Symposium VIII <i>Philadelphia</i>	
Sept 15-17	NSRP All-Panel Meeting <i>Philadelphia</i>	DFP focus



Questions?