



**Product Design & Material
Technologies Major Initiative Team
Lead (MITL)
2nd Quarter '10 Report**

**Barry Espeseth, PDMT MITL
John Walks, PDMT Asst MITL
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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**



Miscellaneous MITL/NSRP Items

● 2010 Strategic Investment Plan (SIP) Update

- MITLs and Panel Chairs met to begin the process in March
- Next meeting will be in July
- NAVSEA will have an active role in the SIP development
- MITL Team will be assigned to collect comments to specific sections of the PDMT portion of the SIP.
- Any comments from PDMT NSRP members are welcomed.
- Present Sub-initiative Categories with include:
 - » Design Rules Standards & Methods (John Walks lead)
 - » Advanced Product Designs (Dave Wood lead)
 - » Material Standards & Standardization (Barry Espeseth lead)
 - » Advanced Materials (Barry Espeseth lead)



Miscellaneous MITL/NSRP Items

- **SIP PDMT Major Initiative Team Members:**

- The following individuals will be supporting the PDMT portion of the SIP 2010 revision

- » **Barry Espeseth PDMT MITL**

- » **John Walks PDMT Asst MITL**

- » **Dave Wood PDMT Panel Chair**

- » **John Malone PDMT Panel Vice Chair**

- » **Allen McConnell NAVSEA**

- » **Richard Storch University of Washington**

Navy Suggested Improvements for successful RA Projects



- Improving quality and variety of proposals
 - Fully develop management aspects
 - » business case, project management plans, identifiable deliverables)
 - “What I am going to do” and “How it is going to help” statements that fit into Major Initiatives Goals/Objectives
 - Proposals that focus on production, construction and operations
 - » work sequencing, steel improvements, modularity and interface controls
- Priorities
 - Improve quality (reduce rework)
 - Reducing Total Ownership Costs from acquisition through life of the ship
 - Energy efficiency (reduce both operational needs and resources used in production of the ship)
- Familiar Categories
 - Labor (proper sequencing and work location, planning, etc.)
 - Material (CFE and GFE) (reduce costs with common parts, proper timing for reduced handling and storage, bulk buys, etc.)
 - Overhead (improve / optimize operations)

NSRP Suggested Improvements for Successful RA Projects



FOCUS AREA	ELEMENT EXAMPLES
Reduction of Total Ownership Costs (RTOC)	<ul style="list-style-type: none"> • Increase use of Composites • Design for Maintenance and Repair • Part Commonality
Promote Modular Construction	<ul style="list-style-type: none"> • Outfit Modules/ Standard Interim Products • Structural Modules / Standard Interim Products • Cable Splicing/Connectors • Testing of Modules • Protection of equipment on modules • Control environment for efficient outfitting
Improve Specifications and Standards	<ul style="list-style-type: none"> • Eliminate unnecessary and redundant requirements. • ABS NVR ABS /Supships
Intra-operability	<ul style="list-style-type: none"> • Integrating in house systems, (ERP, PDM, estimating , planning, scheduling, material procurement and control, etc)
Improve Safety and Health / Reduce Environmental Impacts	<ul style="list-style-type: none"> • Provide industry face to OSHA and EPA • Green the shipyard

Navy Suggested Improvements for Successful RA Projects



FOCUS AREA	ELEMENT EXAMPLES
Improve Design for Production	<ul style="list-style-type: none"> • Planning, sequencing (1,3,8) • Steelwork • Modularity and Interfaces • Outfitting • Material handling • Production process standards • Production engineering effectiveness/training • Ship spec evaluation alternatives • Quality and control training (rework) • Electrical Ships
Improve Shipyard Outsourcing and Supply Chain Integration	<ul style="list-style-type: none"> • Outsourcing strategies • Supply chain data sharing • Part Commonality • Steelwork coding system
Improve Ship Construction and Outfitting	<ul style="list-style-type: none"> • Welding • Onboard services • Staging/access • Painting, Electrical, Piping • Storage and warehousing technology/process/planning
Improve Organization and Management	<ul style="list-style-type: none"> • Master planning model standard • Operations Department buy-in to tech improvements/corporate commitment • Basic Industry to Navy data interfaces (ATIS) • Maritime Industry/Navy path stds - training/education/recruitment /visibility



Questions?