



NATIONAL SHIPBUILDING RESEARCH PROGRAM
ADVANCED SHIPBUILDING ENTERPRISE

Reducing Naval Ship Construction & Repair Costs

Common Parts Catalog (CPC) Enhancements Project

Product Design and Materials Technologies
Panel Meeting - June 15-16 in Pittsburgh, PA



NSRP Research Announcement (RA)

- **It's been a successful journey!**
- **NSRP RA 0801 issued Oct. 19**
- **CPC Enhancement abstract was submitted on Nov. 12**
 - Developed by the CPC participating shipyards with EB as the lead.
- **Content of this abstract was;**
 - Task 1 – Network, Software and Application Changes, Task 2 – Model inclusion and exchange, Task 3 – Functionality enhancements and Task 4 – Additional participation.
- **The abstract submitted on Nov. 12 received a Grade of “A”**
- **Based on the abstract response, the team developed an NSRP proposal – CPC Enhancements Project – and submitted it on Feb. 12**
- **Blue Ribbon Panel review March 31**
- **Notification of selection on April 29 “as proposed”**
- **30-Day Letter Contract executed May 3.**
- **Definitive Technology Investment Agreement executed June 9**



Common Parts Catalog (CPC) Enhancements

➤ **This Project is comprised of four major tasks over a two year period**

- **Task 1 – Network, Software and Application Changes**

- Participants – EB, BIW, NGSB-GC, JDA, CSC, NGIT
- Schedule – May 2010 – March 2011

- **Task 2 – Model Inclusion and Exchange**

- Participants – EB, BIW, NGSB-GC, JDA, Siemens, CSC, NGIT
- Schedule – Dec. 2010 – Sept 2011

- **Task 3 – Functionality Enhancements**

- Participants – EB, BIW, NGSB-GC, CSC, NGIT
- Schedule – Sept. 2010 – March 2012

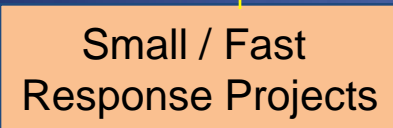
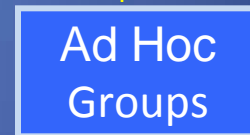
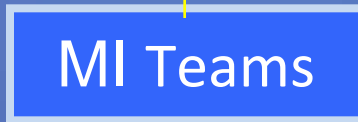
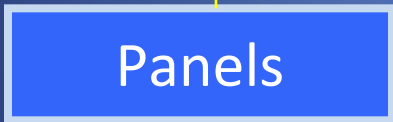
- **Task 4 – Additional Participation**

- Participants – EB, BIW, NGSB-GC, NGSB-NN, NASSCO, PNSY
- Schedule – March 2011 – March 2012

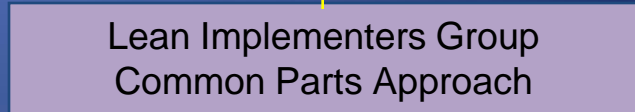




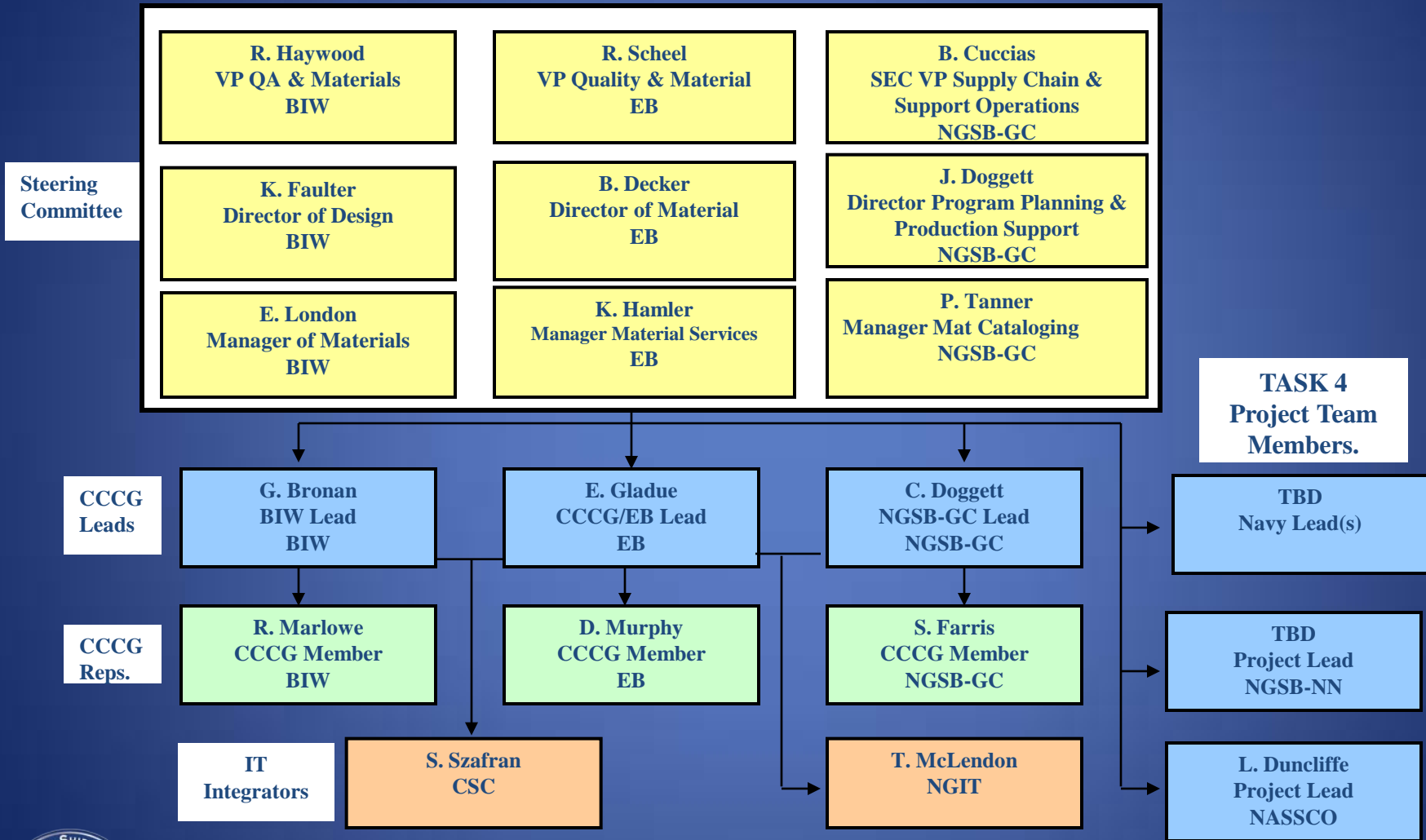
Executive Control Board



- CPC Enhancement Project
 - Larry Karns (ATI)
 - Bill Brill (PTR)



Project Team & Management Structure



Task 1 – Network, Software and Application Changes

- Implementation Strategy;
 - Project starts with Kick Off meeting held at BIW on May 18-20
 - It is estimated to take 6 – 9 months to upgrade the current S/W environment.
 - Direction agreed to following the kick off would be to upgrade the GD environment, “clone” it and send to NGSB-GC for installation.
 - NGSB-GC would install and then regression testing of basic functionality and part sharing would take place at both sites.
 - Upon successful completion of testing, both sites would turnover to production.
- A Detailed Project Plan is being developed
 - June – Dec. upgrade the GD Software and send to NGSB-GC
 - Jan – Feb install and test.
 - March Turnover to Production.



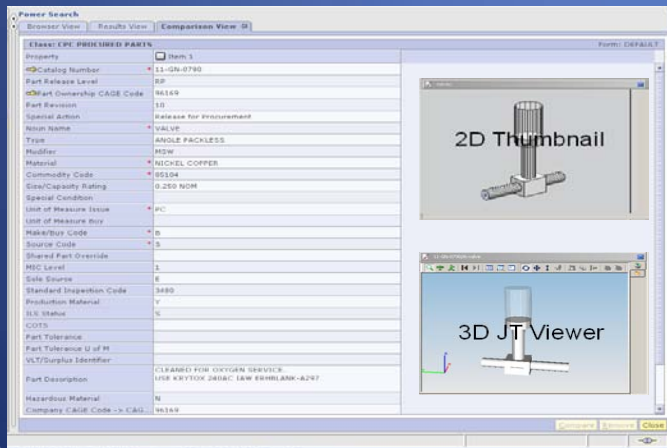
Task 2 – Model Inclusion and Exchange

Current CPC search results

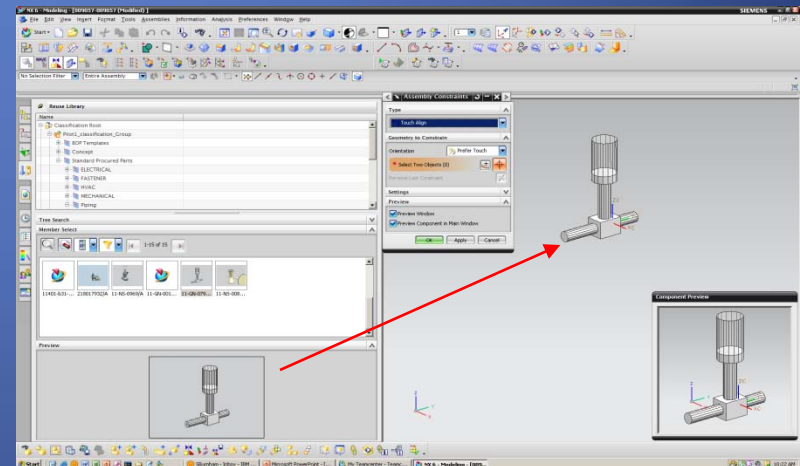


The addition of models to CPC will support more efficient part searches and promote the re-use of already established cross platform designs .

CPC search results with 2D and 3D



Drag and drop into CAD session



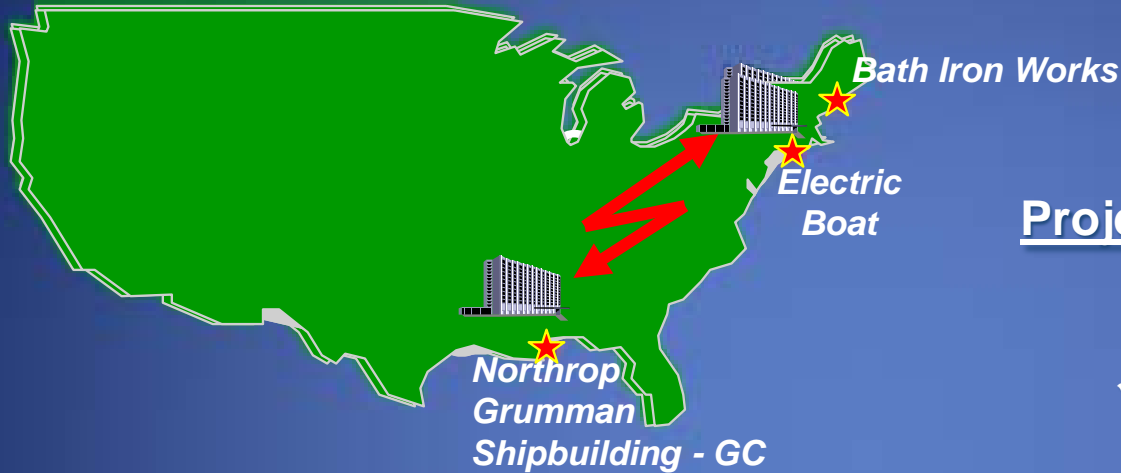
Task 3 – Functionality Enhancements

- We have three sources of enhancement requests
 - **CPC Navy Pilot**
 - *More National Stock Numbers (NSN) in CPC*
 - *Include shipyard inventory levels for the part numbers*
 - *Include Carrier part numbers*
 - **CGNx/CGx Material Standardization and Procurement Working Group**
 - *One common set of procurement notes*
 - *Material inventory data for purposes of identifying urgently needed material for participating yard acquisition*
 - *Cross-Contract Material Use and Part Identification (specification 'effective' dates)*
 - *Consolidated procurements*
 - **Participating Shipyards**
 - *Build part and document creation templates*
 - *Creating an electronic part request capability*
 - *Increase the level of Integrated Logistics Support Data*
 - *The ability to add large amounts of text data to an attribute*
 - *The ability to search within attachments*

These enhancements will be managed with the existing Central Configuration Control Group Change Request Process

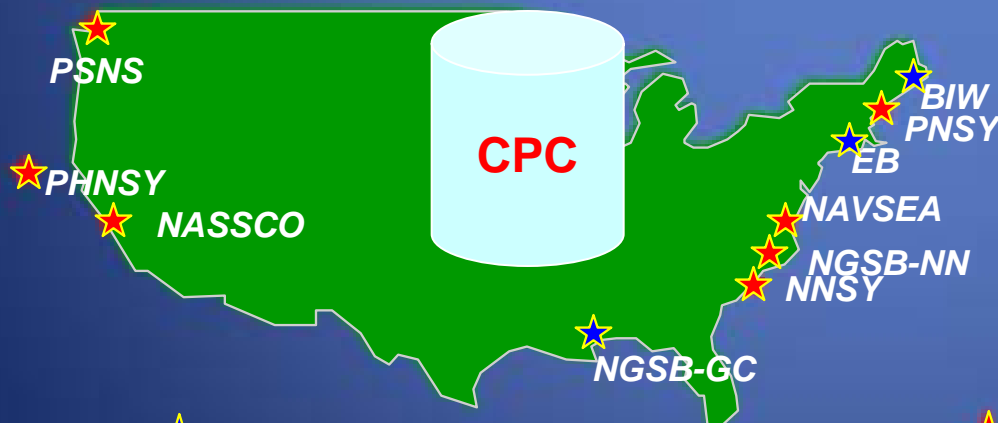


Task 4 – Additional Participation



Project Steps For A “Go / No Go” Recommendation

- ✓ Current State
 - Data
 - Systems
- ✓ Lessons Learned
- ✓ Best Practices
- ✓ Desired Future State
- ✓ Develop system design and interface requirements
- ✓ Business Case
- ✓ Three final reports:
 - ✓ NGSB-NN, NASSCO, Navy



★ CPC Participating Shipyards

★ Potential Participants



Schedule of Activities - Tasks & Milestones

MILESTONE NUMBER	TASK	DATE	PAYABLE MILESTONES and ASSOCIATED DELIVERABLES	Incremental % Complete	Cumulative % Complete
1	5 - Program Management	05/15/10	Kick-off Meeting	100	100
2	5 - Program Management	06/15/10	Program Management Plan	30	30
3	5 - Program Management	06/15/10	Technology Transfer Plan	30	30
4	1 - Network, Software and Application Changes	06/30/10	Efforts described in the First Quarter Technical Status Report	25	25
5	5 - Program Management	06/30/10	First Quarter Business and Technical Status Reports	10	10
6	1 - Network, Software and Application Changes	09/30/10	Efforts described in the Second Quarter Technical Status Report		
7	3 - Functionality enhancements	09/30/10	Efforts described in the Second Quarter Technical Status Report		
8	5 - Program Management	09/30/10	Second Quarter Business and Technical Status Reports		
9	1 - Network, Software and Application Changes	12/31/10	CCCG procedures, Data Element Dictionary, Classification Schema, Data Model Architecture revisions with Task 1 impacts		
10	2 - Model inclusion and exchange	12/31/10	Efforts described in the Third Quarter Technical Status Report		
11	3 - Functionality enhancements	12/31/10	Efforts described in the Third Quarter Technical Status Report		
12	5 - Program Management	12/31/10	Third Quarter Business and Technical Status Reports		



Schedule of Activities - Tasks & Milestones (cont'd)

13	1 - Network, Software and Application Changes	03/31/1 1	Final Report Task 1		
14	2 - Model inclusion and exchange	03/31/1 1	Efforts described in the Fourth Quarter Technical Status Report		
15	3 - Functionality enhancements	03/31/1 1	Efforts described in the Fourth Quarter Technical Status Report		
16	4 - Additional participation	03/31/1 1	Efforts described in the Fourth Quarter Technical Status Report		
17	5 - Program Management	03/31/1 1	Fourth Quarter Business and Technical Status Reports		
18	2 - Model inclusion and exchange	06/30/1 1	CCCG procedures, Data Element Dictionary, Classification Schema, Data Model Architecture revisions with Task 2 impacts		
19	3 - Functionality enhancements	06/30/1 1	Efforts described in the Fifth Quarter Technical Status Report		
20	4 - Additional participation	06/30/1 1	Efforts described in the Fifth Quarter Technical Status Report		
21	5 - Program Management	06/30/1 1	Fifth Quarter Business and Technical Status Reports		
22	2 - Model inclusion and exchange	09/30/1 1	Final Report Task 2		
23	3 - Functionality enhancements	09/30/1 1	Efforts described in the Sixth Quarter Technical Status Report		
24	4 - Additional participation	09/30/1 1	Efforts described in the Sixth Quarter Technical Status Report		



Schedule of Activities - Tasks & Milestones (cont'd)

25	5 - Program Management	09/30/1 1	Sixth Quarter Business and Technical Status Reports		
26	3 - Functionality enhancements	12/31/1 1	CCCG procedures, Data Element Dictionary, Classification Schema, Data Model Architecture revisions with Task 3 impacts		
27	4 - Additional participation	12/31/1 1	Efforts described in the Seventh Quarter Technical Status Report		
28	5 - Program Management	12/31/1 1	Seventh Quarter Business and Technical Status Reports		
29	3 - Functionality enhancements	03/31/1 2	Final Report Task 3		
30	4 - Additional participation	03/31/1 2	Final Report Task 4		
31	5 - Program Management	03/31/1 2	Eighth Quarter Business and Technical Status Reports		
32	5 - Program Management	04/30/1 2	Final Business and Technical Status Reports		



Technology Transfer Plan

Quarter/ Year	Event	Geographic Area Covered	Purpose	Scope
2 nd / 10	PDMT Panel Meeting	East Coast (Pittsburgh, PA)	Project Introduction, Status and Tech Review	Project Objectives, Plan, Next Steps
3 rd / 10	PDMT Panel Meeting	West Coast (San Francisco)	Project Status, and Tech Review Milestone	Project Overview with emphasis on Task 1 Go/no Go Status Task 1 Deliverables Task 2 kickoff
2 nd / 11	ShipTech & PDMT Panel Meeting	Gulf Coast (Biloxi)	Project Status, and Tech Review	Final Status Task 1
1 st / 11	PDMT Panel Meeting	East Coast (Washington, D.C.)	Project Status, and Tech Review	Kickoff Task 4
3 rd / 11	PDMT Panel Meeting	West Coast (San Francisco)	Project Status, and Tech Review	Final Status Task 2
4 th 12	Ship Tech & PDMT Panel Meeting	Gulf Coast (Biloxi)	Project Status, and Tech Review	Final Status Tasks 3,4,5 Demonstration



Foreign Access to Technology

- Research findings and technology developments may constitute a significant enhancement to the national defense
- Access to important technology by foreign persons must be carefully controlled
- Requires compliance with:
 - Export Administration Regulation (15 CFR 730-774) (EAR)
 - International Traffic in Arms Regulations (22 CFR 120-130) (ITAR),
 - National Industrial Security Program Operating Manual (DoD 5220.22-M) (NISPOM)
- Article shall be included in all sub-tier subcontracts or other forms of lower tier agreements





Questions?

NATIONAL SHIPBUILDING RESEARCH PROGRAM



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