



Navy ManTech Program Focused on Affordability

**NSRP Surface Prep & Coatings Panel Meeting
June 21-22, 2011
Marinette, WI**

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Overview

- **Investment Strategy Update**
- **FY12 Planning - Planned New Starts**
- **FY13 Planning**
 - Available Funding at COEs
 - New Candidate Project Process
- **Upcoming Meetings**
- **COE Recompete Update**
- **NSRP Awards**
- **DARPA Open Manufacturing Program**





Investment Strategy Update

Addressing affordability

Primary Focus			Secondary Focus				
	<u>PEO (Subs)</u> VIRGINIA Class		<u>PEO (Ships)</u> LCS Class DDG 51 Class		<u>PEO (Carriers)</u> CVN 78 Class		<u>PEO (JSF)</u> F-35

- **Shipbuilding Changes for FY12**
 - Expanded TOC reduction from VIRGINIA only to all ship classes in strategy
 - Removed DDG 1000
 - Added DDG 51 Restart and Flight III
- **Added Secondary focus on Joint Strike Fighter acquisition affordability**
 - Working with DOD and Air Force ManTech programs on coordinated portfolio



FY12 Planning Update

- FY12 Planning Cycle complete
- FY12 Platform Plans sent to Program Offices mid-Apr for approval
- Project proposal phase (detailed project planning) ongoing
- Several FY12 projects initiating late FY11 – great news ...
- **ACTION** - COE Directors – need input on required Navy lab support for FY12 for ongoing and new projects (email by 30 Jun)

Annual Cycle

- | | |
|---|--------------|
| 1. ManTech Investment Strategy Guidance | Jul 10 |
| 2. Industry / COE Discussions & Idea Generation | Aug – Dec 10 |
| 3. ManTech Program Office Approval | Dec 10 |
| 4. Program Office Prioritization and Approval | Jan - Feb 11 |
| 5. Approved Prioritized Plan per Platform | Mar – Apr 11 |
| 6. Project Proposal Phase | Apr – Jul 11 |
| 7. Proposal Review / Approval | Jul – Aug 11 |
| 8. Project Initiation | Oct 11 |

FY12 Planning – VCS (includes projects not yet started from FY11 cycle)

COE	Project Name	FY Start	Est Start	Comments
Planned New Starts				
CNST	GFM Process Improvement	Late FY11	Jun-11	FY11 Planning Cycle
NMC	Pipe Assembly Installation Improvement Methods	Late FY11	Sep-11	Spin off of previous EB project; incl in FY12 Part 1 TO plan/cost budget for submittal 29 Apr 2011; ONR Contracts to issue TO contract mod by 30 Jun 2011
CMTC	VCS Carbon Sail Cap	Late FY11	Sep-11	FY14 - \$850K; adding to FY11 new start - Sail Cap Covers (existing contract); lots of overlap so total won't be too projects added together (less than that shown for delta); start Jul 11
CMTC	VCS Non-Metallic Sail Trailing Edge	Late FY11	Sep-11	PPD stage; PDR by mid-Apr; planning 01 Aug submittal to ONR; start 15 Sep (Apr 20 update)
iMAST	Improved Abrasives Technology	FY12	Oct-11	Can start in FY11; other platforms as well; shipbuilding / ship overhaul; coordinating with 04 and EB; draft PPD almost ready. 12-18 mo effort.
CNST	NFPC Propeller Project	FY12	Nov-11	FY11 Planning Cycle
CNST	Lead Installation Process Improvement	FY12	Oct-11	EB #1 priority but not highest ROI
CNST	Improved Welder Productivity	FY12	Oct-11	
iMAST Portion	Improved Welder Productivity	FY12	Oct-11	
iMAST	VCS Improved Non-Skid Topside Treatments	FY12	Oct-11	
NMC	Elimination of Back Gouging on C Seam Welds	FY12	Nov-11	
NMC	Hull Fabrication Improvement Phase III	FY12	Oct-11	
NMC	Cladding Cost Reduction for VCS Seawater Valves	FY12	TBD	FY11 Planning Cycle; GDEB would like delay until Fall 2011

Technically Viable and/or Still in Work but Funding Not Available				
CNST	VCS Outfitting Tooling & Processes			FY13?
iMAST Portion	VCS Outfitting Process Improvement			
iMAST	Facility Lifting and Handling Improvement			Can start without CNST / EB but would have to be FY13 CNST start
CNST Portion	Lifting and Handling Planning Tools			
CNST	Handheld Digital Technology			

FY12 Planning – DDG-51

COE	Project Name	FY Start	Est Start	Comments
Planned New Starts				
iMAST	Improved Interior Deck Coatings	Late FY11	Ongoing	Folded into S2297 - Rapid Cure Deck Coatings. Applicable to new construction and overhaul.
NMC	Thin Plate Distortion Mitigation	Late FY11	Jul-11	Phase I effort for original Solutions to Plate Distortion issue. Distortion Reduction Techniques will be Phase II. Incl in FY12 Part 1 TO plan/cost budget for submittal 29 Apr 2011; ONR Contracts to issue TO contract mod by 30 Jun 2011
B2P	Benchmarking Towed Array Manufacturing	Late FY11	TBD	Not on original list; B2P working and intends to start late FY11; AME-type project
CNST	Alternative Stud Attachment Methods for Use in Shipbuilding	FY12	Oct-11	Updated PPD w EWI; \$700K avail FY12
EOC	DDG-51 WDM Optical Cable Interconnect	FY12	Nov-11	
EMPF Portion	DDG-51 WDM Optical Cable Interconnect	FY12	Oct-11	
EMPF	GaN Solid State Continuous Wave Illuminator Transmitter	FY12	Oct-11	\$12M program with \$6M from IWS
NMC	Precision Panel Inserts	FY12	Dec-11	Added May 2011

Bookkept for CVN / Planned New Start				
EOC	Fiber Optic System Design and Installation Improvements	FY12	Oct-11	EOC FY12 new start for CVN; DDG secondary focus

Technically Viable but Funding Not Available				
CNST	Laser Projection to Improve Outfitting Efficiency			
CNST	Adhesive Bonding of Non-Structural Bulkheads			Still trying to develop with GC
CMTC	Composite DDG 51 Project 1			Working, but no defined project yet (Mar 2011)

Since Apr 2011 update:

Zigbee Radios for RFID Material Tracking (B2P)– OBE and Precision Panel Inserts (NMC) added

FY12 Planning – CVN

COE	Project Name	FY Start	Est Start	Comments
Planned New Starts				
NMC	Weapons and Stores Elevator Door Improvements	Late FY11	Mar-11	
B2P	EMP Protection Methods for CVN Cables	Late FY11	May-11	
EOC	Fiber Optic Network Installation on Ships	FY12	Oct-11	DDG 51 secondary focus
NMC	Weapons Door Manufacturing Improvement	FY12	Oct-11	

FY12 Planning – LCS

COE	Project Name	P.O. Comments	FY Start	Est Start	Comments
Planned New Starts					
CNST	High Productivity Aluminum Manufacturing	Approved 2/9	Late FY11	Sep-11	
NMC	Sliding Door Mfg Improvements		Late FY11	Sep-11	Incl in FY12 Part 1 TO plan/cost budget for submittal 29 Apr 2011; ONR Contracts to issue TO contract mod by 30 Jun 2011
NMC	Anchor Pocket Mfg Improvements		Late FY11	Aug-11	Incl in FY12 Part 1 TO plan/cost budget for submittal 29 Apr 2011; ONR Contracts to issue TO contract mod by 30 Jun 2011
iMAST	LCS Advanced Planning & Facility Toolset		Late FY11	May-11	Newly identified project
CMTC	LCS SeaRAM 11-Round Canister	Approved 2/9	FY12	Oct-11	
CMTC	LCS Project 1	Orig Comp Project approved 2/9	FY12	Oct-11	4 LCS projects in sent to P.O. for review. Intending to fund 2 projects.
CMTC	LCS Project 2	Orig Comp Project approved 2/9	FY12	Oct-11	4 LCS projects in sent to P.O. for review. Intending to fund 2 projects.



FY13 Planning Update

- Will be kicking off FY13 planning process shortly
- FY13 planning process - same timeline as FY12 planning process
 - Schedule moved forward to ensure that projects are well-planned and start on time
- Expecting FY13 budget increase
 - Opportunity for both platforms and COEs
- Focus remains on projects with large affordability payoffs and solid transition paths

Avail FY13 Funding for New Starts (as % of COE Total)

<u>COE</u>	
CMTC	█
CNST	█
EMPF	█
EOC	█
iMAST	█
NMC	█



FY13 Planning Process



Jun

COEs Project FY13 Available Funding

Jul

ManTech Issues Investment Strategy Guidance

Aug

COEs Investigate Candidate Projects

COEs articulate the strategy into COE-centric focus areas, and develop candidate projects with industry partners included in strategy

Sep

COEs Evaluate Candidate Projects

COEs evaluate their projects through their COE process, and evaluate the project as it relates to the ManTech strategy, coordinate with Program Office as needed

Oct

Nov

Brief Candidate Projects

COE Directors brief ManTech Director / PrOfs (quad chart format)
Meeting outcome: Yes/No & COE assignment

Dec

Jan

Candidate Project Commitment

ManTech presents candidate projects to Program Office to get Program Office project input and priorities

Feb

Mar

FY13 Spend Plan & Projects Determined

ONR determines new start projects and next FY spend plan

Apr

ManTech Publishes New FY13 Projects



COE Re compete Update

- **Electro-Optics** Awarded Jun 2010
- **Metalworking** Awarded Aug 2010
- **Composites** In Source Selection
- **Electronics** In Source Selection





Upcoming Program Reviews

Program Reviews:

- | | | | |
|-------------------------|-----------|------|-------------------|
| • Joint (CVN, VCS, LCS) | 24-26 May | EOC | Pittsburgh, PA |
| • VCS | 30-31 Aug | GDEB | Quonset Point, RI |
| • CVN | 27-28 Sep | EMPF | Philadelphia, PA |
| • PEO (Ships)(LCS, DDG) | 25-26 Oct | CMTC | Greenville, SC |

Other Dates of Interest:

- | | | | |
|-------|--------------|----------------|-------------|
| • DMC | 28 Nov–1 Dec | Convention Ctr | Anaheim, CA |
|-------|--------------|----------------|-------------|





NSRP

Collaboration Opportunities

- **PEO (IWS) now contributing to NSRP**
- **Scope for NSRP projects will expand to include weapons integrator issues**
- **Opportunity for ManTech COEs to collaborate with industry on NSRP proposals**
 - Panel projects
 - Research Announcement projects
- **FY11 Research Announcement published Sep 2010 ... FY12 will be earlier**





NSRP FY11 Research Announcement Awards

Six projects awarded - \$14.6M (both Navy funding / industry cost share)

1. First Time Quality, Non-Destructive Examination, & Fitness for Service Technology for Friction Stir Welding & Manufacturing Aluminum Panels for Ships

- **Lead:** Bollinger Shipyards; **Funding:** \$3.3M; **Industry Cost Share:** \$2.2M
- **ManTech Participants:** CTC, EWI

2. Swaged Bulkhead Analysis Verification

- **Lead:** GD NASSCO; **Funding:** \$935K; **Industry Cost Share:** \$777K

3. Elimination of Over Welding to Reduce Distortion in Naval Shipbuilding Applications

- **Lead:** Ingalls Shipbuilding; **Funding:** \$1.7M; **Industry Cost Share:** \$1.4M
- **ManTech Participant:** CTC

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

- **Lead:** Bollinger Shipyards; **Funding:** \$1.0M; **Industry Cost Share:** \$840K

5. Naval Vessel Ice Capability Optimization Effort

- **Lead:** GD NASSCO; **Funding:** \$912K ; **Industry Cost Share:** \$912K

6. 21st Century Smart Weld Inspection to Improve Ship Performance

- **Project Lead:** Servo-Robot Corp; **Funding:** \$456K ; **Industry Cost Share:** \$364 K



DARPA / DSO Open Mfg Program

- **Vision - reduce barriers to manufacturing innovation, speed, and affordability of materials, components, and structures by:**
 1. Invest in technologies to enable affordable, rapid, adaptable, energy-efficient manufacturing and fabrication processes
 2. Promote comprehensive manufacturing design, simulation and performance prediction tools
 3. Facilitate exposure to best practices
- **BAA released - 5 May / responses due - 23 Jun**
- **https://www.fbo.gov/index?s=opportunity&mode=form&id=be4346eff31b9a86d1b5ab8ebfe710af&tab=core&_cview=0**

