



* **P**roduction / **M**anufacturing / **N**aval **C**onstruction
Earned **V**alue Working Group
(PMNC EV Working Group)

* This is a Name Change to Engage /
Embrace Ship Construction Members

PMSC
10 – 11 September 2013
SAP, Newtown Square, PA



Team Roster

Production / Manufacturing / Naval Construction Earned Value Working Group

<u>Name</u>	<u>Company</u>	<u>Name</u>	<u>Company</u>
✓ Scott Gring	Lockheed Martin	✓ Marty Doucette	EVM Services
✓ Kim Herrington	Bell Helicopter	• Kathy Pelletier	BAE Systems
• Beau Willis	US Navy	• David Johnson	Marinette Marine
✓ Edward Silvia	Raytheon	• Brian Bartlett	Marinette Marine
✓ John Kanicsar	Orbital	✓ Phil Norris	Austal USA
• Blake Crenshaw	Raytheon	✓ Joseph Runkel	Austal USA
• David Bates	PWC	✓ Lisa Ramos*	Lockheed Martin
• Deborah Duffy	Pratt & Whitney	✓ Danny Squires*	L-3Com
• Dave Pantano	Lockheed Martin	✓ Scott Gaul*	NRI
• Melissa Slaughter	Delta Resources		
✓ Dave Roberts	Accenture		
• Karen Frisk	Pratt & Whitney		
• Cynde Christle	General Dynamics		
• Ruth Fleming	Rockwell Collins		
✓ Deb Matthews*	General Dynamics		
• Sabrina Davis	General Dynamics		
• Jim Ashton	General Dynamics		
• Gordon Kranz*	PARCA		

✓ = In Attendance Today

* **First Time Attendees – Interested in Continuing**

More than 20
Members – Greater
than 10 consistently
involved members



Highlights



Production / Manufacturing / Naval Construction Earned Value Working Group

- ✓ EVM in a Production Environment Whitepaper Released October 2011
- ✓ Follow-on Brainstorming January 2012
- ✓ Phase II Scope Proposed March 2012
- ✓ Phase II Scope Defined and Approved by Working Group March 2012
- ✓ Phase II Effort Initiated April 2012
- ✓ Working Group Facilitator Transition May 2012
- ✓ Phase II Working Group Sessions June 2012 – June 2013
- ✓ Call for Authors for Draft Appendix to Prod EV Whitepaper June 2013

Meetings Conducted Every Month Since May 2012
Average of 7 Working Group Members per Session



Production / Manufacturing vs Development EVMS Analysis using the DCMA Cross Reference Checklist as a Guide – Summarized Results



Production / Manufacturing / Naval Construction Earned Value Working Group

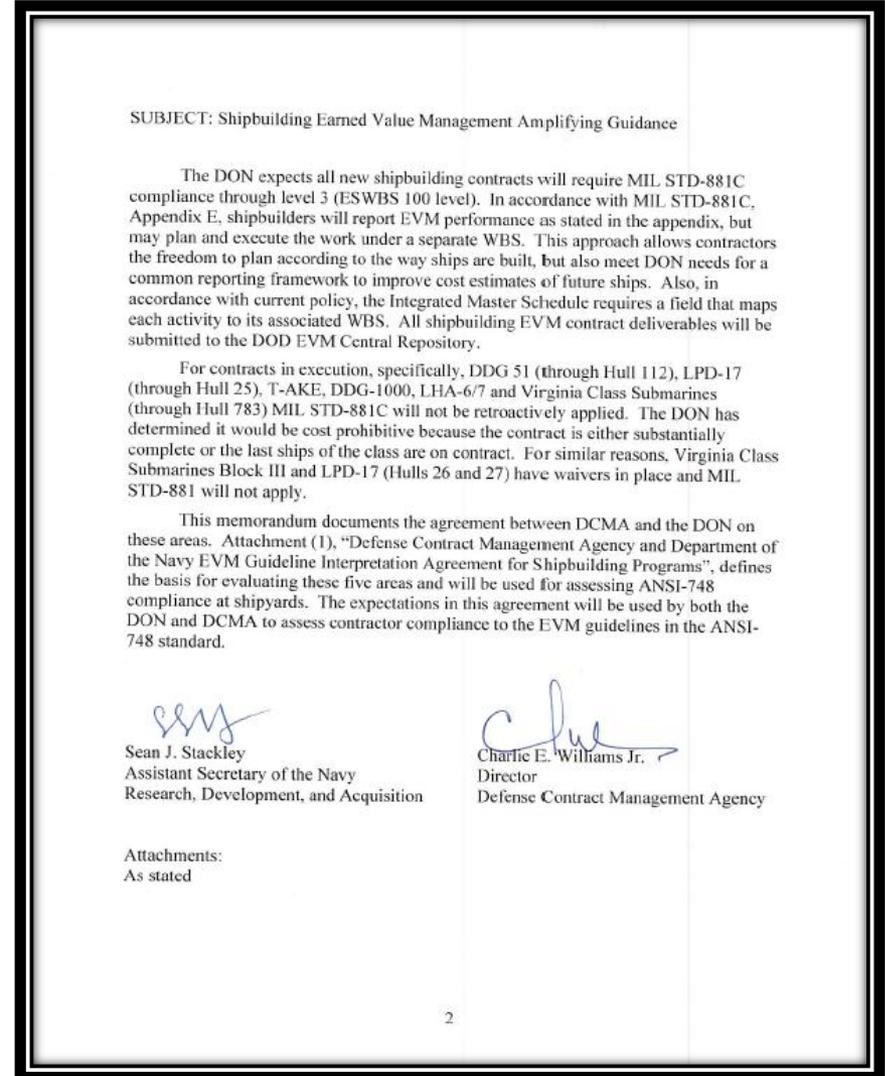
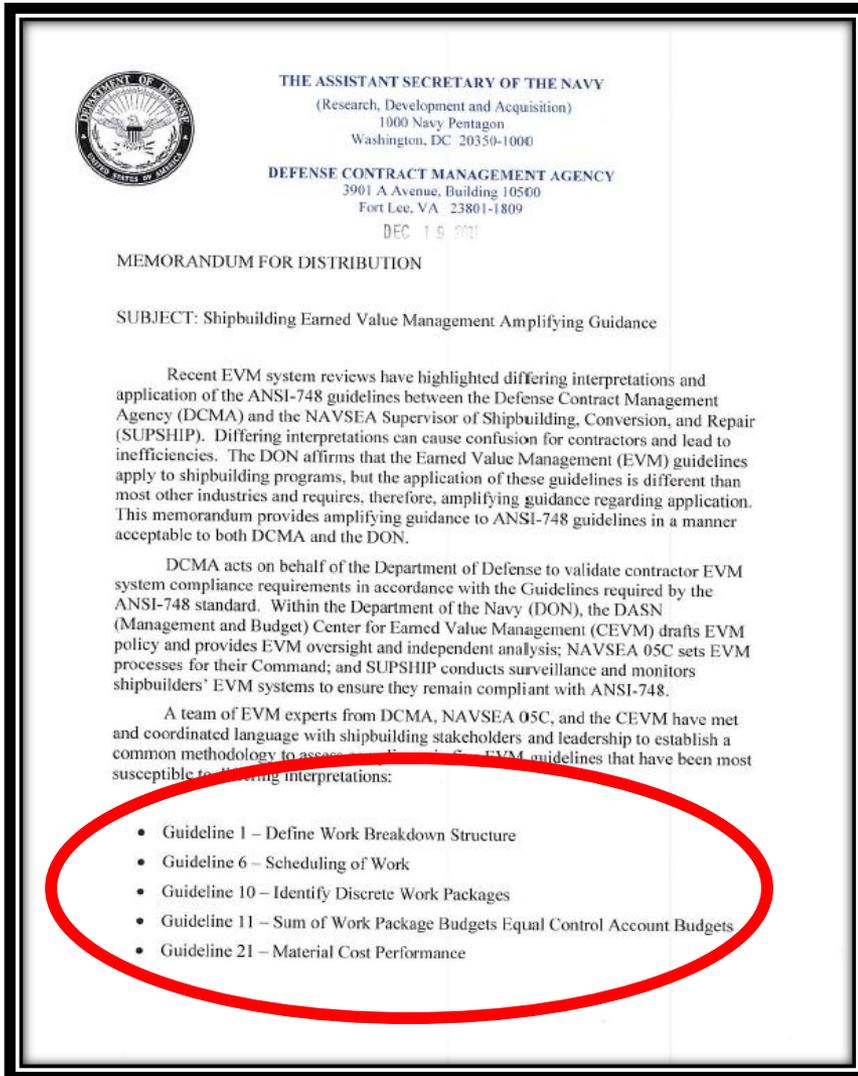
1. Organization
 - **Guideline 1** - *Define the authorized work elements for program. A work breakdown structure (WBS), tailored for effective internal management control, is commonly used in this process.*
2. Planning, Scheduling, & Budgeting
 - **Guideline 6** - *Schedule the authorized work in a manner which describes the sequence of work and identifies significant task interdependencies requires to meet the requirements of the program.*
 - **Guideline 10** - *To the extent it is practical to identify the authorized work in discrete work packages, establish budgets for this work in terms of dollars, hours, or other measurable units. Where the entire control account is not subdivided into work packages, identify the far term effort in larger planning packages for budget and scheduling purposes.*
3. Accounting Considerations
 - **Guideline 21** - *For EVMS, the material accounting system will provide for: (1) Accurate cost accumulation and assignment of costs to control accounts in a manner consistent with the budgets using recognized, acceptable, costing techniques. (2) Cost performance measurement at the point in time most suitable for the category of material involved, but no earlier than the time of progress payments or actual receipt of material. (3) Full accountability of all material purchased for the program including the residual inventory.*
4. Analysis and Managerial Reports
 - **Guideline 22** - *At least on a monthly basis, generate the following information at the control account and other levels as necessary for management control using actual cost data from, or reconcilable with, the accounting system: (1) Comparison of the amount of planned budget and the amount of budget earned for work accomplished. This comparison provides the schedule variance. (2) Comparison of the amount of the work budget earned the actual (applied where appropriate) direct costs for the same work. This comparison provides the cost variance.*
 - **Guideline 23** - *Identify, at least monthly, the significant differences between both planned and actual schedule performance and planned and actual cost performance, and provide the reasons for the variances in the detail needed by program management.*



Shipbuilding Earned Value Management Amplifying Guidance



Production / Manufacturing / Naval Construction Earned Value Working Group





Results Comparison



Production / Manufacturing / Naval Construction Earned Value Working Group

EVM Guidelines Where Application Differs from Development	Production / Manufacturing	Shipbuilding
Organization (1-5)		
• 1 Define WBS	X	X
Planning, Scheduling & Budgeting (GLs 6-15)		
• 6 Schedule Work	X	X
• 10 Discrete Work Packages	X	X
• 11 Sum Work / Planning Pkg		X
Accounting Considerations (GLs 16-21)		
• 21 Material Accounting	X	X
Analysis and Managerial Reports (GLs 22-27)		
• 22 Periodic Control Account Sums	X	
• 23 Determine Variances	X	
Revisions & Data Maintenance (GLs 28-32)		
• None		

Separate Efforts Identified Very Similar Results



Prod vs Dev EVM Checklist Project Path Forward to Completion



- 2nd Quarter 2012, Formally Kicked Off Phase II – Use of EVM in Production Compliance Checklist
- Over-riding Assumption is that we are Focused on Recurring (i.e Production, Manufacturing, Naval Construction) Programs where EVM is applied (e.g. CP, FPI, or FFP (If business case approved))

✓ **Planned Team Discussions in the Following Areas:**

- | | |
|---------------------------------------|--------|
| • Organization | Medium |
| • Planning, Scheduling, and Budgeting | Heavy |
| • Accounting Considerations | Light |
| • Analysis and Managerial Reports | Medium |
| • Revisions and Data Maintenance | Medium |

✓ **Completed Team Discussions Work Package Under Phase II Control Account**

- 40 Pages Complete out of 40 (QBD); Physical % Complete = 100%
- 219 of 219 Line Items Reviewed

➤ **Path to Completion**

- ✓ Identify Key Topical Areas for Detailed Analysis and Draft Write-ups
 - ✓ Assign Authors for ½ - 1 ½ Page Draft Write-ups
- 1) **Integrate Working Group Efforts with SUPSHIPS December 2011 Memo**
 - 2) **Complete Conjoined Drafts, Team Review, Consolidate into a Single PMNC Appendix to the Production EV Whitepaper Update**
 - 3) Re-issue the White Paper (adjudicating the Jim Henderson Comments) with PMNC Appendix



Recent Working Group Effort



- Assigned Guideline Authors with Support Members
- Template for Drafts Developed and Distributed to Authors
- Drafts Write-ups Received for all Identified Guidelines
- Appendix Introduction Drafted and Reviewed by Team
- Review Process Defined on G/L 6
- Remaining G/L's will be Reviewed during Monthly Telecoms (1 – 1.5 Hours)



PMNC EVM Appendix will Provide Source Input for:



- Updated PMSC EVM in Production Environment Whitepaper
- NDIA Planning & Scheduling Excellence Guide Update (2015)
- Government Policy and Process Consideration
- Future NDIA Guides Update
- Influence to Other EVM Users



Questions?