

Industry – Navy Meeting

Time	Topic	Facilitator/Speaker	Objectives, Activities, Deliverables
0715-0730	Seating - All Attendees		
0730-0800	Welcome/ Opening Remarks	Moderator: CDR Tommy Neville Remarks: RDML Jim Downey	Objective: <ul style="list-style-type: none"> • Welcome attendees • Agenda review • Opening remarks
0800-0830	Port Workload Forecast	Mr. Tom Laverghetta	Objective: <ul style="list-style-type: none"> • Provide workload forecasts for all ports • Further refine industry port capacity
0830-0900	CNSF Maintenance & Modernization Summit Overview	Mr. Dave Hulse	Objective: <ul style="list-style-type: none"> • Summary of M&M Summit held in San Diego during the week of 5 Jun 2017 • Discuss top action items from summit
0900-0915	Break		
0915-0945	Contracting Update	CDR Tommy Neville	Objective: <ul style="list-style-type: none"> • Provide an update on coast wide bids • Updater on MAC-IDIQ Award timelines • Detail ongoing contracting initiative
0945-1015	LCS Maintenance Execution Strategy	Ms. Robin Coady CAPT Juan Orozco CDR Joe Saegert	Objective: <ul style="list-style-type: none"> • Discuss the maintenance execution strategies for LCS availabilities
1015-1045	Special Project Overview	Mr. Jeff Brooks	Objective: <ul style="list-style-type: none"> • Provide an overview and current progress of this project
1045-1130	NAVSEA Standard Item (NSI) Review	Mr. Dale Hirschman Mr. Bill Crow	Objective: <ul style="list-style-type: none"> • Provide and update on NSI POA&M and overall review effort • Industry to provide a listing and rationale of “non-value added” NSIs • Conduct a Fire and CAR Safety Metrics discussion
1130-1145	Meeting Wrap Up & Questions	CDR Tommy Neville	Objective: <ul style="list-style-type: none"> • Overview of any new action items • Questions • Set next meeting date
1145	Adjourn		



THE FORCE BEHIND THE FLEET

INDUSTRY – NAVY DISCUSSIONS

Presented by:

RDML Jim Downey

DEPUTY COMMANDER, SURFACE WARFARE (SEA 21) /

COMMANDER NAVY REGIONAL MAINTENANCE CENTER (CNRMC)



EXPAND THE ADVANTAGE



Strategic Alignment



CNO

- Strengthen Naval Power At & From The Sea
 - Achieve High Velocity Learning
- Strengthen Our Navy Team for the Future
- Expand And Strengthen our Network of Partners

ASN(RDA)

- Getting the Requirements Right
 - Making Every Dollar Count
 - Performing to Plan
- Minding a Healthy Industrial Base
- Strengthening Acquisition Workforce



COMNAVSEA

- On-Time Delivery of Ships from Availabilities
 - Culture of Affordability
 - Cyber Security

SEA 21 / CNRMC

- Availability Execution and Performance
 - Fleet Sustainment
- Surface Ship Contracting Strategy
- CG and LSD Modernization Execution
- LCS Sustainment & Maintenance



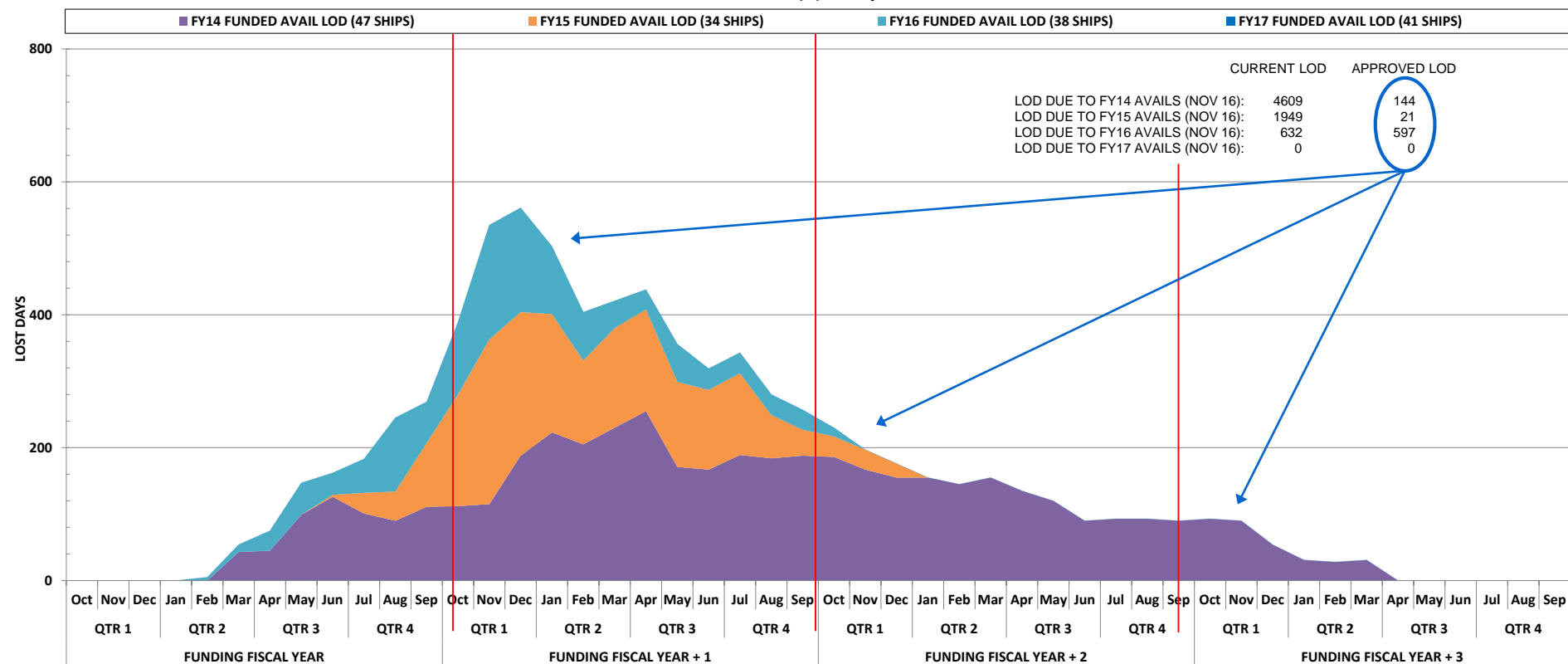
Integrate maintenance strategies, modernization plans, training needs, and technical, logistics to best manage the lifecycle of surface ships



FY14-17 LOD(Y) Comparison



FY14 - 17 LOD (Y) Comparison



95% of CNO Availabilities Currently in Execution are on Track to Meet Current TYCOM Approved End Dates



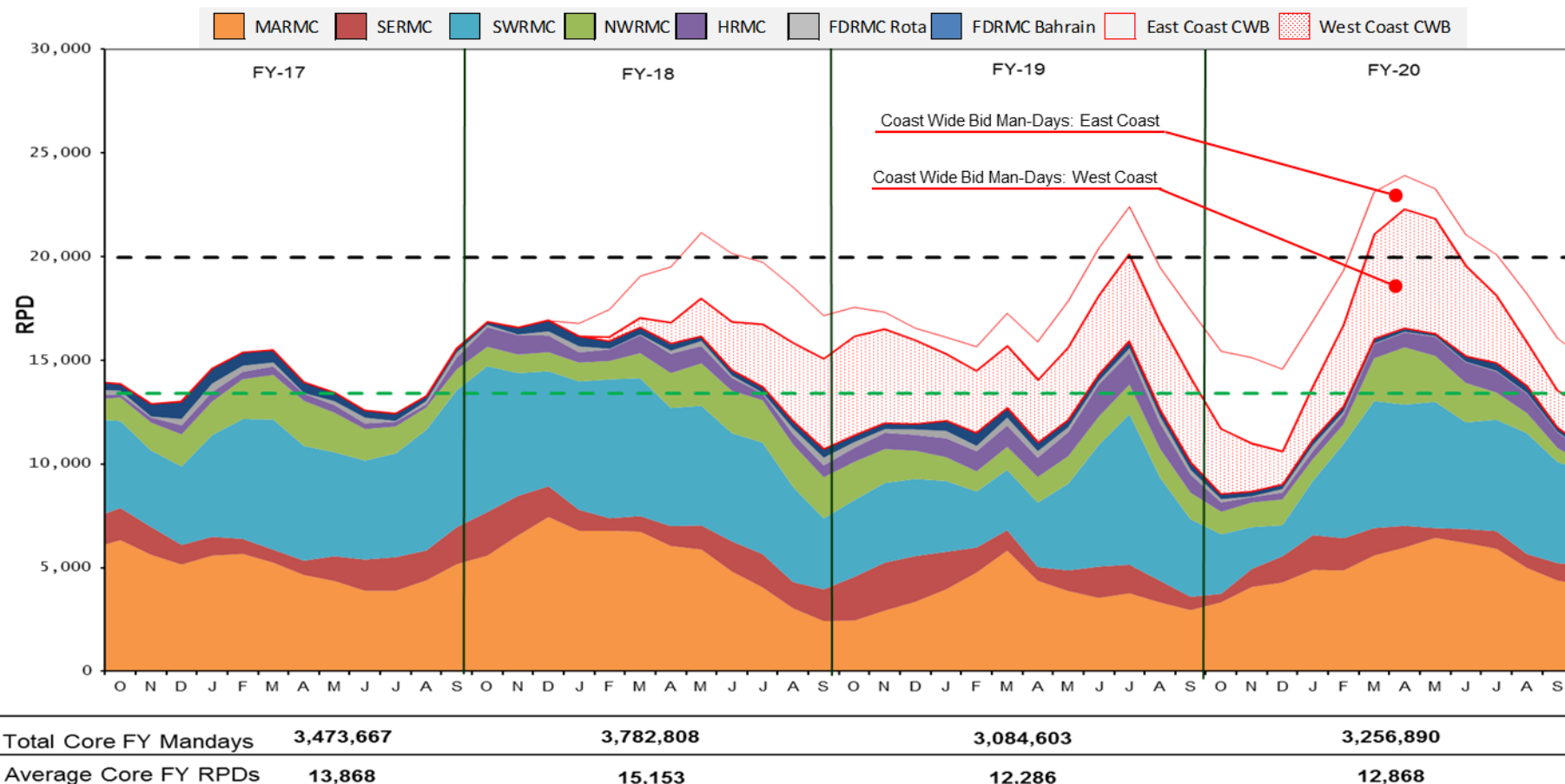
Surface Ships CNO Availabilities



Data Date: 07/21/2017

**Total Private Sector Workload
including MOD estimates (no AIT)
By RMC Roll-Up FY17 - FY20
As of 21 JULY 2017**

USS RAMAGE awarded in Pascagoula, MS, 79,236 MDs not included in roll-up



Green Dash Line: 3-Year Historical Workload Average ~ 13,400 RPD

Black Dash Line: Industry Provided SURGE Capacity ~ 20,000 RPD

**EXECUTING 21 SURFACE SHIP CNO AVAILABILITIES WORLDWIDE
90+ ships in Advance Planning / Planning Phase**

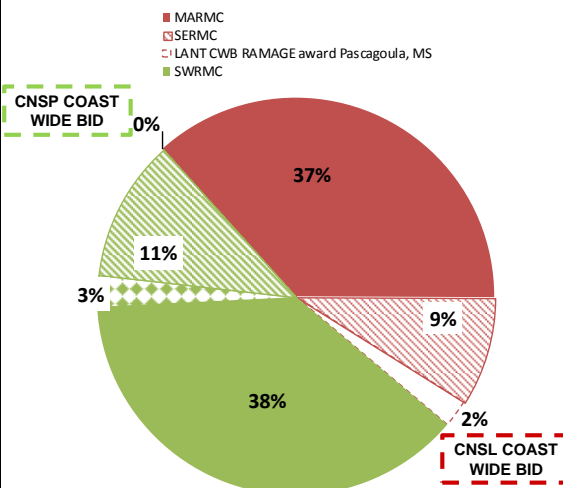


FY17 - FY20 Port Loading by Coast (PERCENT)



RMC	MAN-DAYS
FY17 TOTALS	
MARMC	1,242,589
SERMC	299,143
LANT CWB RAMAGE award Pascagoula, MS	76,282
SWRMC	1,287,524
HRMC	86,697
NWRMC	390,457
PAC CWB	0
FY18 TOTALS	
MARMC	1,374,320
SERMC	327,590
LANT CWB	450,429
SWRMC	1,415,233
HRMC	176,127
NWRMC	370,198
PAC CWB	362,264
FY19 TOTALS	
MARMC	949,122
SERMC	348,615
LANT CWB	447,932
SWRMC	1,032,464
HRMC	262,375
NWRMC	335,789
PAC CWB	949,641
FY20 TOTALS	
MARMC	1,286,918
SERMC	244,789
LANT CWB	652,873
SWRMC	1,114,697
HRMC	169,219
NWRMC	365,242
PAC CWB	870,109

FY 17 PORT LOAD



FY17

EAST COAST: 48%

WEST COAST: 52%

ALL AWARDED FY17 CWB SHIPS (6) WERE AWARDED TO THEIR RESPECTIVE HOME PORT, WITH THE EXCEPTION OF USS RAMAGE (DDG 61).

CWB EAST COAST TO AWARD: 0
CWB WEST COAST TO AWARD: 0

FY18

EAST COAST: 48%

WEST COAST: 52%

CWB EAST COAST TO AWARD: 5
CWB WEST COAST TO AWARD: 5

FY19

EAST COAST: 40%

WEST COAST: 60%

CWB EAST COAST TO AWARD: 7
CWB WEST COAST TO AWARD: 6

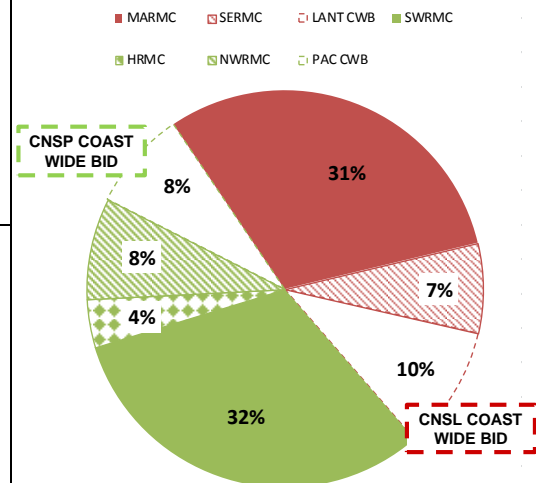
FY20

EAST COAST: 46%

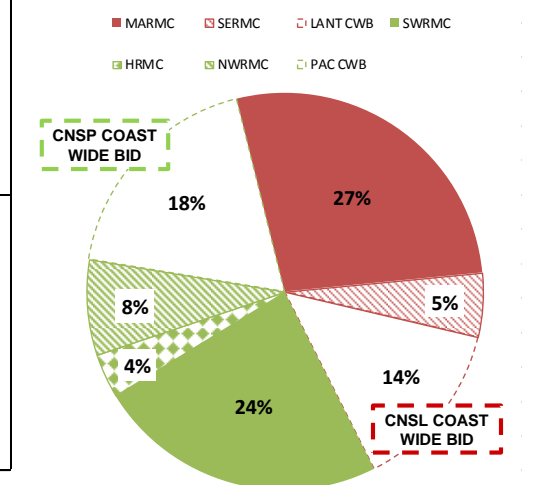
WEST COAST: 54%

CWB EAST COAST TO AWARD: 5
CWB WEST COAST TO AWARD: 6

FY 18 PORT LOAD



FY 20 PORT LOAD

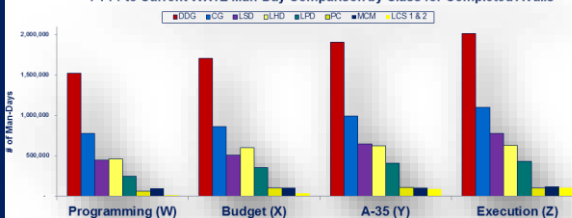


Requirements Through Execution

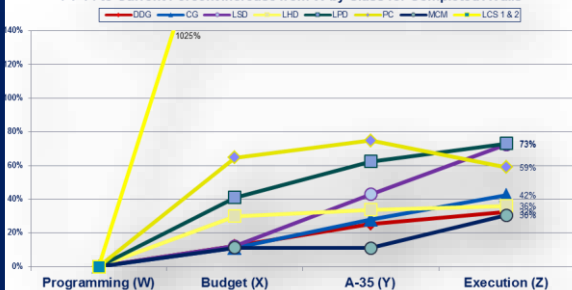
Requirements and Planning

- 3PP
- Availability Duration Scorecard (ADS)
- Work Item Front Loads
- Risk Management and Mitigation

FY14 to Current WXYZ Man-Day Comparison by Class for Completed Avails



FY 14 to Current Percent Increase from W by Class for Completed Avails



Surface Contracting

- MACMO (FFP)
- Emergent Maintenance (FFP/CPFF)
- 3PP (CPAF)
- Coast Wide Bid (FFP)
- Contract Award Timeline (A60→A120)

MAC-MO

- CNO Availabilities & Continuous Maintenance Availabilities (CMAVs)

3rd Party Planning

- Planning

FFP

CPAF

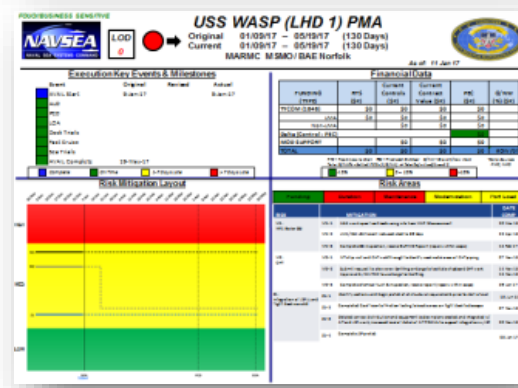
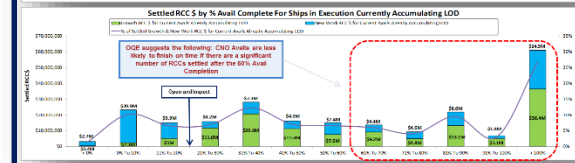
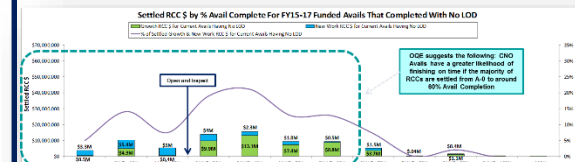
- Emergent Maintenance (EM)

FFP / CPFF



Execution

- Risk / Change Management Discipline
- C+21 IPTD



FYDP Workload / Workforce Focus Areas

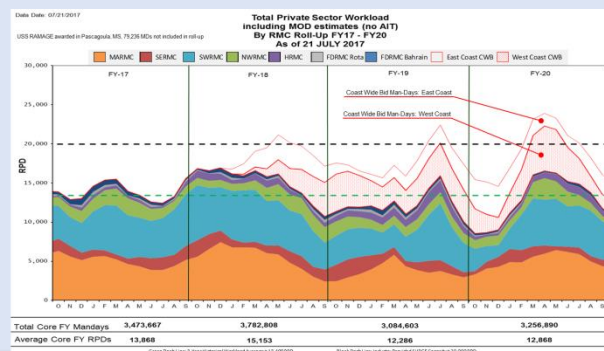
Transition to In-Service



- LCS:
 - San Diego has been home to four (4) LCS-1 and LCS-2 class ships for several years
 - Workload growing to 6 ships by the end of FY18 and 10 ships by the end of FY20
- Preps for DDG 1000 transition

Workload Peaks in FY18-FY20

- Workload forecast 135%
- Peaks compounded by differed FY17 avails (unfunded), increasing numbers of LCS, and the introduction of DDG 1000 Zumwalt class destroyers

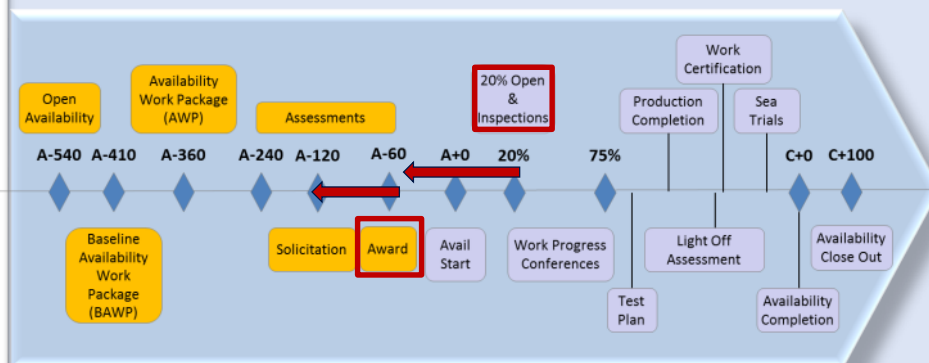


Notional Service Life Extension and Reactivation to Support USN Battle Force

- Preliminary senior Navy discussions to extend the service life of in-service CG, DDG, LHD, LHA, LSD, LPD 17, LCS, and CLF Class Ships
- Navy evaluating cost/scope for: manpower, HM&E, Combat Systems, C4I, Battle Spares, 2S COG, Obsolescence, Operations and Infrastructure to extend service life



Stability / Predictability of Funding & Requirements



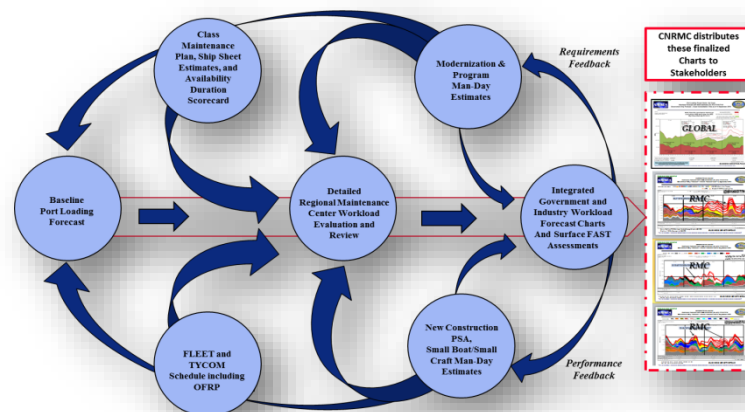


Back Up



Ongoing Priority 1 Initiatives

- Priority 1: On-time, on-budget delivery
- Focus includes workload forecasting Duration Analysis and work package definition
- Executing Coast Wide Bid strategy for avails > 10M
- Risk Management discipline
- "Performance to Plan"
- Managing change and adhering to schedules



Early and Transparent Planning is Mission Critical to On-Time / On-Budget Execution



Port Workload Forecast

*DESIGN, BUILD, DELIVER AND MAINTAIN
SHIPS AND SYSTEMS ON TIME AND ON
COST FOR THE UNITED STATES NAVY*

EXPAND THE ADVANTAGE



Mr. Tom Laverghetta

- Congressional Language
- SEA 21 / CNRMC Portfolio Overview
- Private Sector Workload Assessment
- Workload Forecasting
- Surface Ship Contract Strategy
- Summary

Quarterly Private Sector Workload Updates

FY17 NDAA: S. 2943-77/SEC. 325 Private Sector Port Loading Assessment

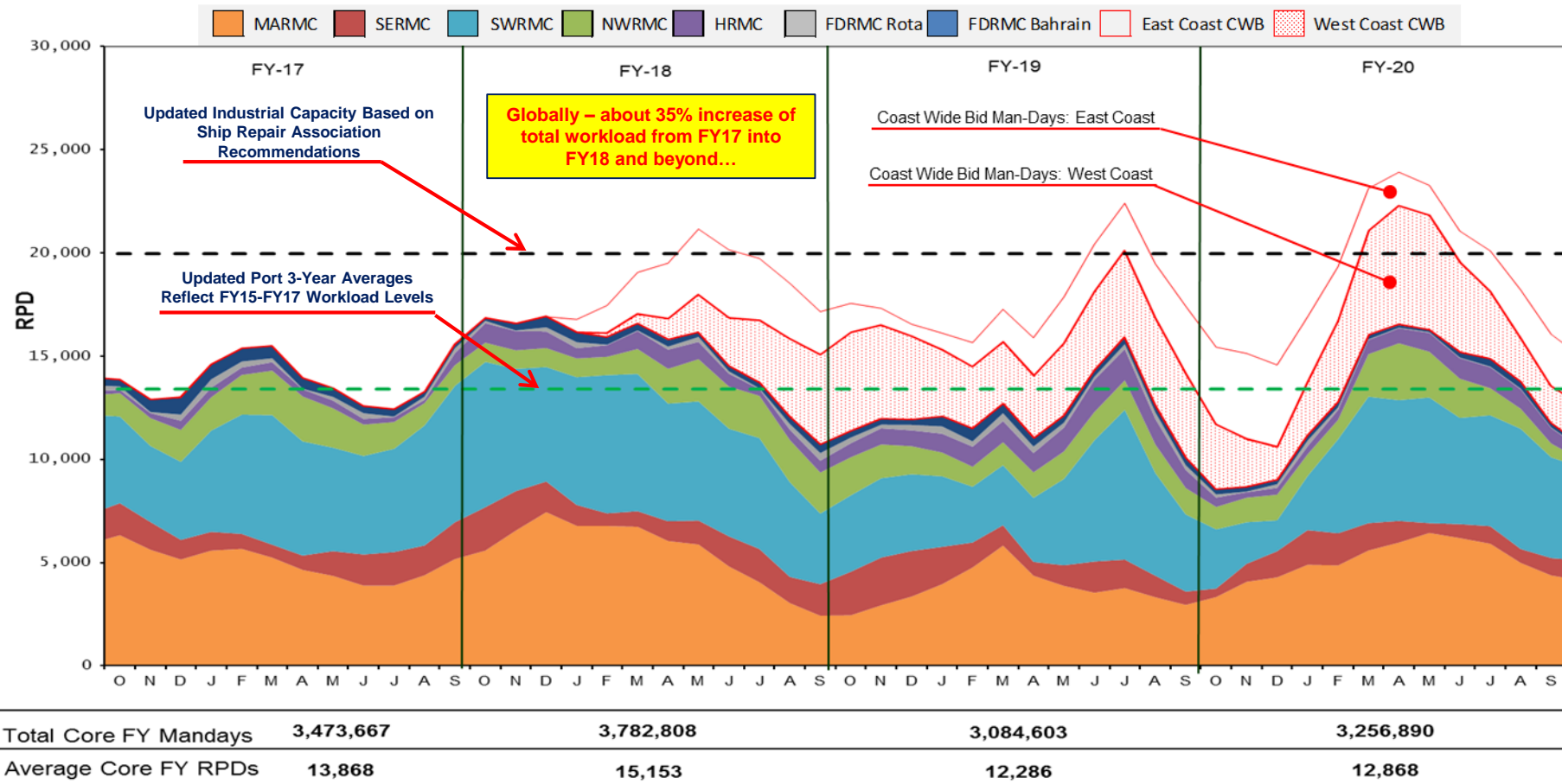
- “The Navy shall conduct quarterly assessments of naval ship maintenance and loading activities carried out by private sector entities at each covered port.”
 - “Each assessment shall include:
 - 1) Resources per day, including daily ship avails and the workforce available to carry out maintenance and loading activities for the FY preceding the quarter covered by the assessment through the end of such quarter.
 - 2) Projected resources per day, including daily ship availabilities and the workforce available to carry out maintenance and loading activities, through the end of the second FY beginning after the quarter covered by the assessment.
 - 3) A description of the methods by which the Secretary communicates projected workloads to private sector entities engaged in ship maintenance activities and ship loading activities.
 - 4) A description of any processes that have been implemented to allow for timely feedback from private sector entities engaged in ship maintenance/loading activities.
 - a) Briefings Required on a quarterly basis until September 31, 2021, the Secretary shall provide to the Committees on Armed Services of the Senate and the House of Representatives (and the other congressional defense committees on request):
 - A briefing on the results of the assessments conducted under subsection (a.), and
 - A chart depicting the information described in paragraphs (1) and (2) of subsection (b) with respect to each covered port.
 - In this instance, covered ports will include: Mayport, Florida; Norfolk, Virginia; Pearl Harbor, Hawaii; Puget Sound, Washington; San Diego, California and when applicable, other such ports may be utilized as part of the Coast-Wide Bid process.”
-
- Conducted two direct briefings of workload with Congressional staff (March and June)
 - Next brief is tentatively late August/early September
 - Workload posted to FEDBIZOPs
 - Release at least January, March, June, August to coincide with Industry Forums
 - Regular industry forums provide dialog on workload strategy
 - Surface Navy Association (SNA), NSRIC, Mega Rust, FMMS

Surface Ships Currently in CNO Avails

Data Date: 07/21/2017

USS RAMAGE awarded in Pascagoula, MS, 79,236 MDs not included in roll-up

Total Private Sector Workload including MOD estimates (no AIT) By RMC Roll-Up FY17 - FY20 As of 21 JULY 2017



Green Dash Line: 3-Year Historical Workload Average ~ 13,400RPD

Black Dash Line: Industry Provided SURGE Capacity ~ 20,000RPD

EXECUTING 26 SURFACE SHIP CNO AVAILABILITIES WORLDWIDE
100+ ships in Advance Planning / Planning Phase

MARMC Private Sector Workload Forecast with MOD estimates (no AIT) FY17-FY20 as of 21 JULY 2017

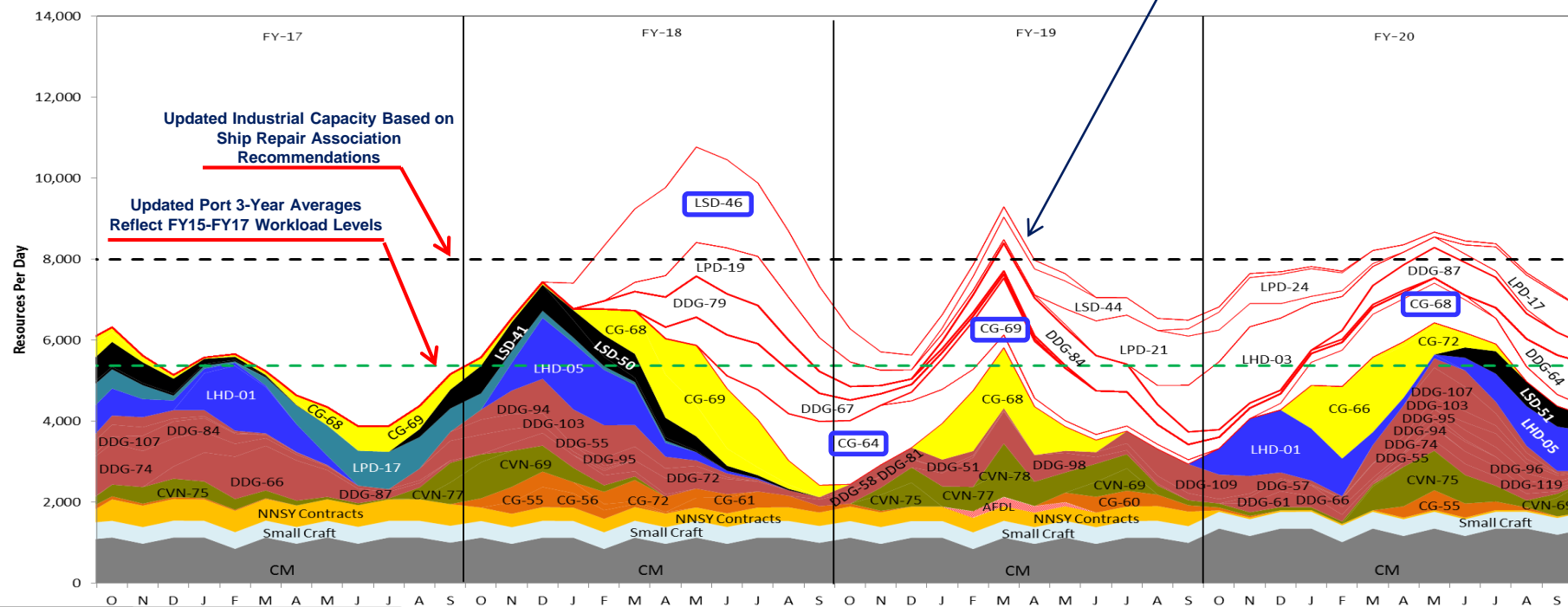
Workload Color Legend

- CM
- CG
- DDG
- LHD
- LSD
- CVN
- LPD
- SMCR
- CG / LSD Modernization Program
- CG / LSD MOD Availability (CWB)
- AFDL
- Estimated NNSY Contracting Plan

Last Update: 07/21/2017

MARMC Private Sector
Workload Forecast Estimate with MOD (no AIT) FY17-FY20
Baseline as of 21 JUL 2017

Red line indicates workload level if coast wide bid work remains at MARMC. Associated MDs NOT included in totals/average in chart legend



Total TYCOM, CM & MOD
FY Mandays

1,242,589

1,374,320

949,122

1,286,918

Average TYCOM, CM & MOD
FY Mandays

4,991

5,508

3,756

5,074

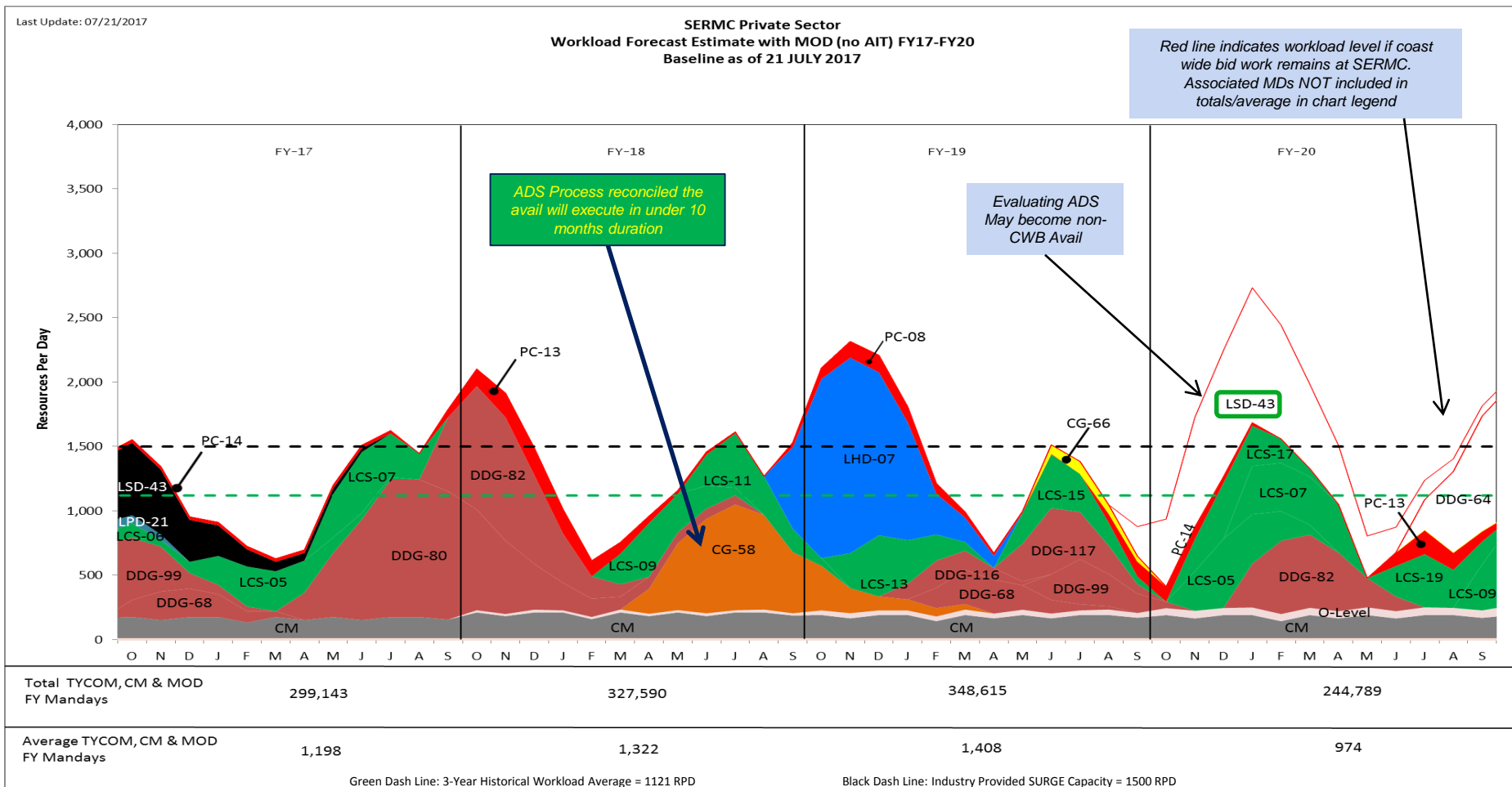
Green Dash Line: 3-Year Historical Workload Average = 5368 RPD

Black Dash Line: Industry Provided SURGE Capacity = 8000 RPD

SERMC Private Sector Workload Forecast with MOD estimates (No AIT) FY17-FY20 As of 21 JULY 2017










Workload Color Legend

CM	CG	DDG	FF	LCS	LHD	LPD	LSD	CG / LSD Modernization Program
							PC	O Level



SWRMC Private Sector
Workload Forecast with MOD estimates (No AIT) FY17-FY20
As of 21 JULY 2017

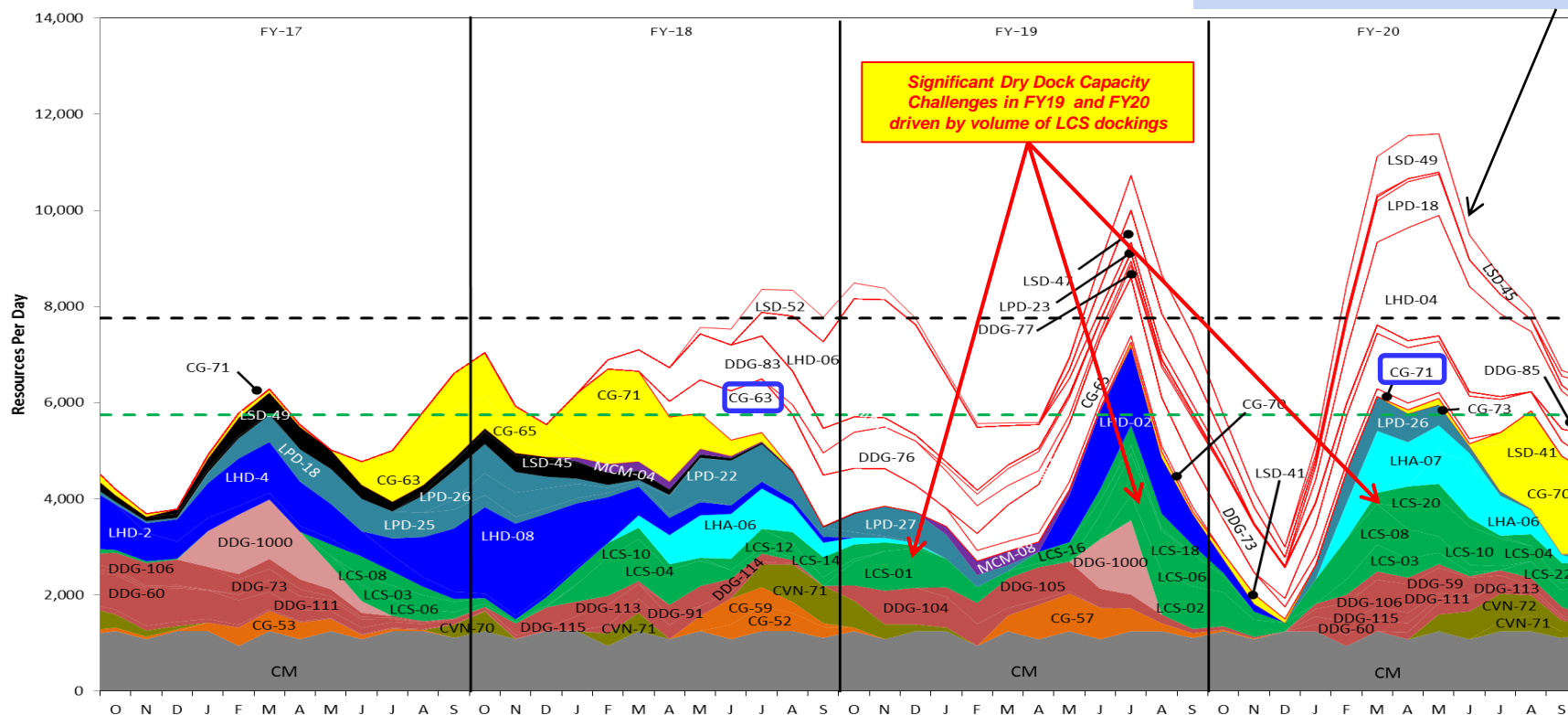
Workload Color Legend

	CM		CG		DDG		LHA		LHD		LPD		LSD		MCM		CG / LSD Modernization Program
	CG / LSD MOD Availability (CWB)								CVN		FF		LCS		DDG-1000 +		

Last Update: 07/21/2017

SWRMC Private Sector
Workload Forecast Estimate with MOD (no AIT) FY17-FY20
Baseline as of 21 July 2017

Red line indicates workload level if coast wide bid work remains at SWRMC. Associated MDs NOT included in totals/average in chart legend



Total TYCOM, CM & MOD
FY Mandays

1,287,524

1,415,233

1,032,464

1,114,697

Average TYCOM, CM & MOD
FY Mandays

5.115

5.678

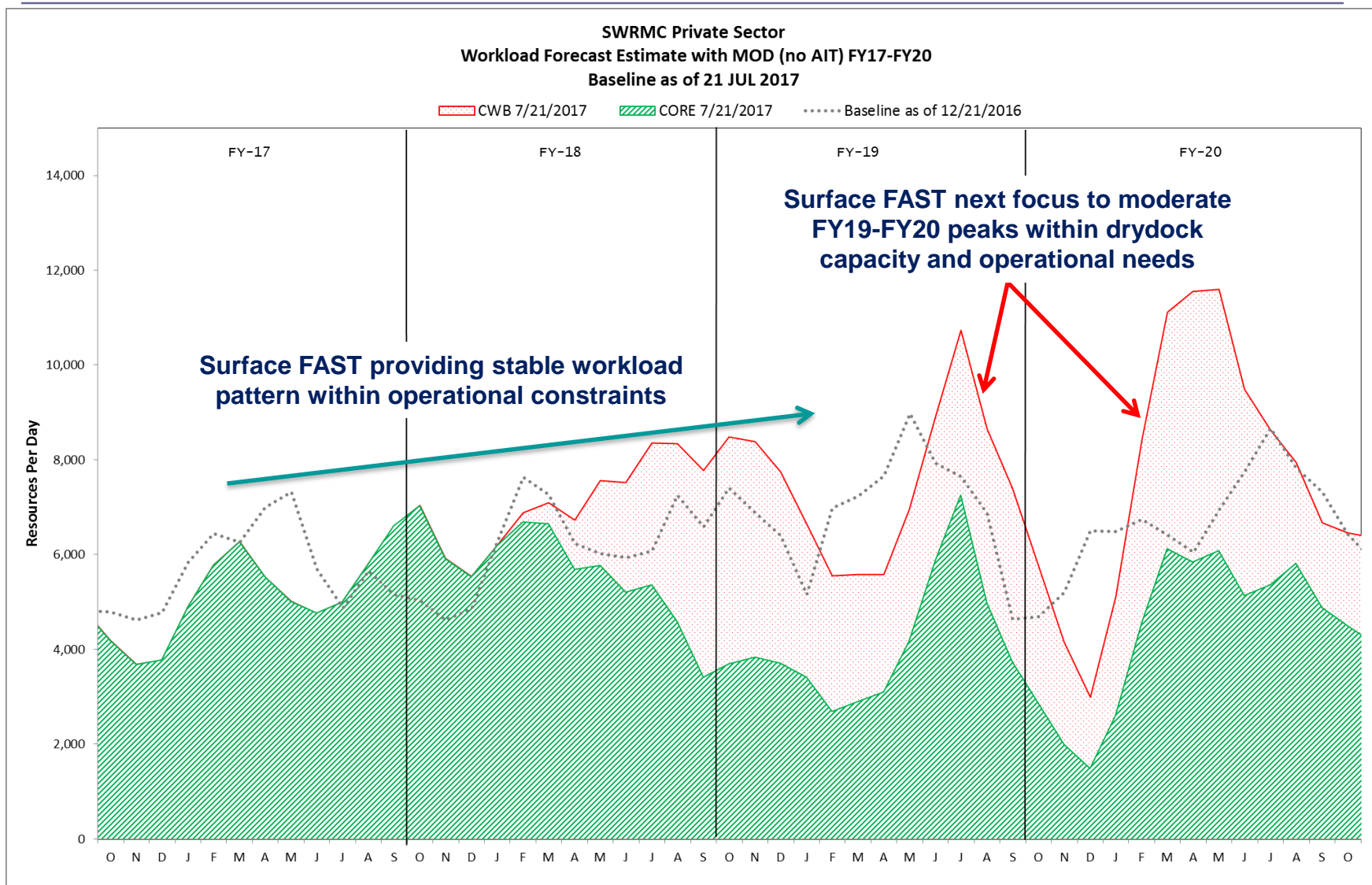
4.121

4,404

Green Dash Line: 3-Year Historical Workload Average = 5743 RPD

Black Dash Line: (135% of Historical Workload Average) SURGE Capacity = 7752 RPD (Industry provided threshold under review)

Example of Surface FAST Efforts



NWRMC Private Sector

Workload Forecast with MOD estimates (No AIT) FY17-FY20

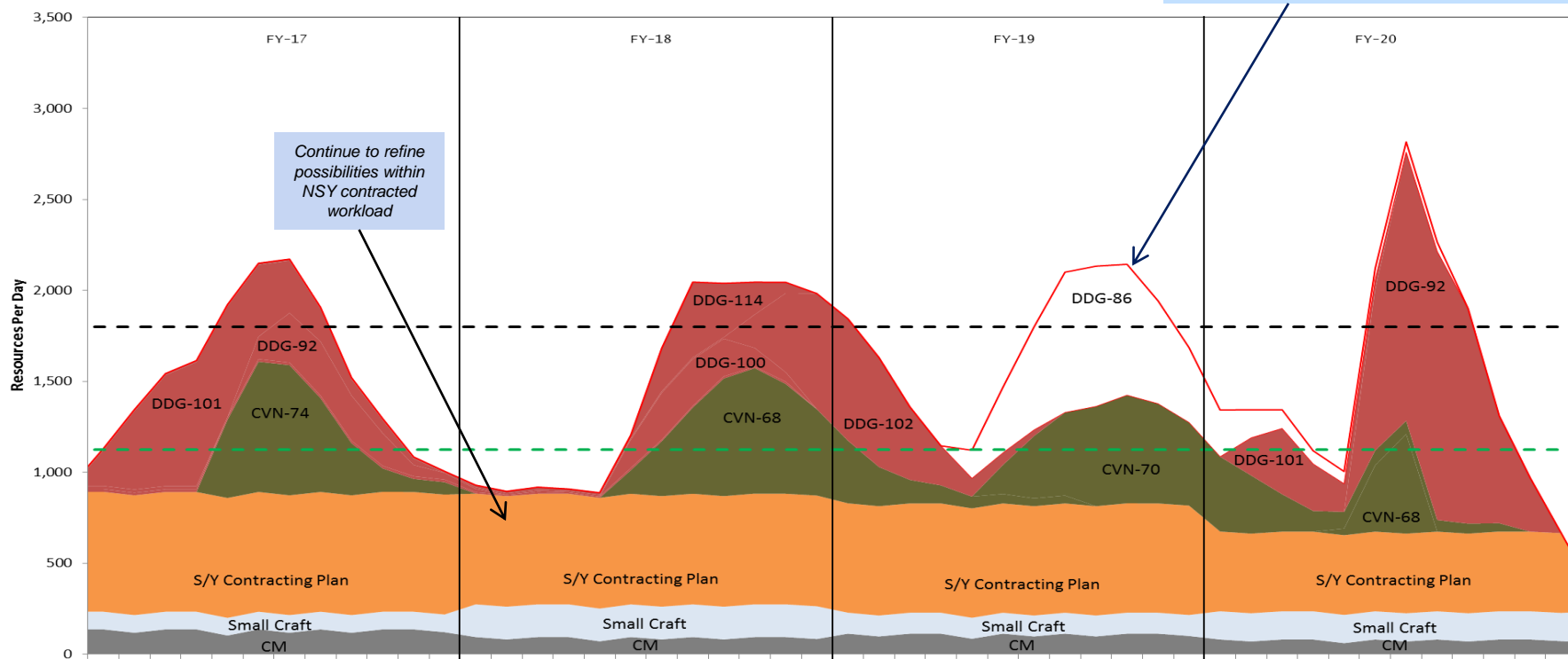
As of 21 JULY 2017

DDG CVN CM SMCR S/Y Contracting Plan

Last Update: 07/21/2017

NWRMC Private Sector
Workload Forecast Estimate with MOD (no AIT) FY17-FY20
Baseline as of 21 JULY 2017

Red line indicates workload level if coast wide bid work remains at NWRMC. Associated MDs NOT included in totals/average in chart legend



Total TYCOM, CM & MOD FY Mandays	390,457	370,198	335,789	365,242
Average TYCOM, CM & MOD FY Mandays	1,557	1,465	1,338	1,448

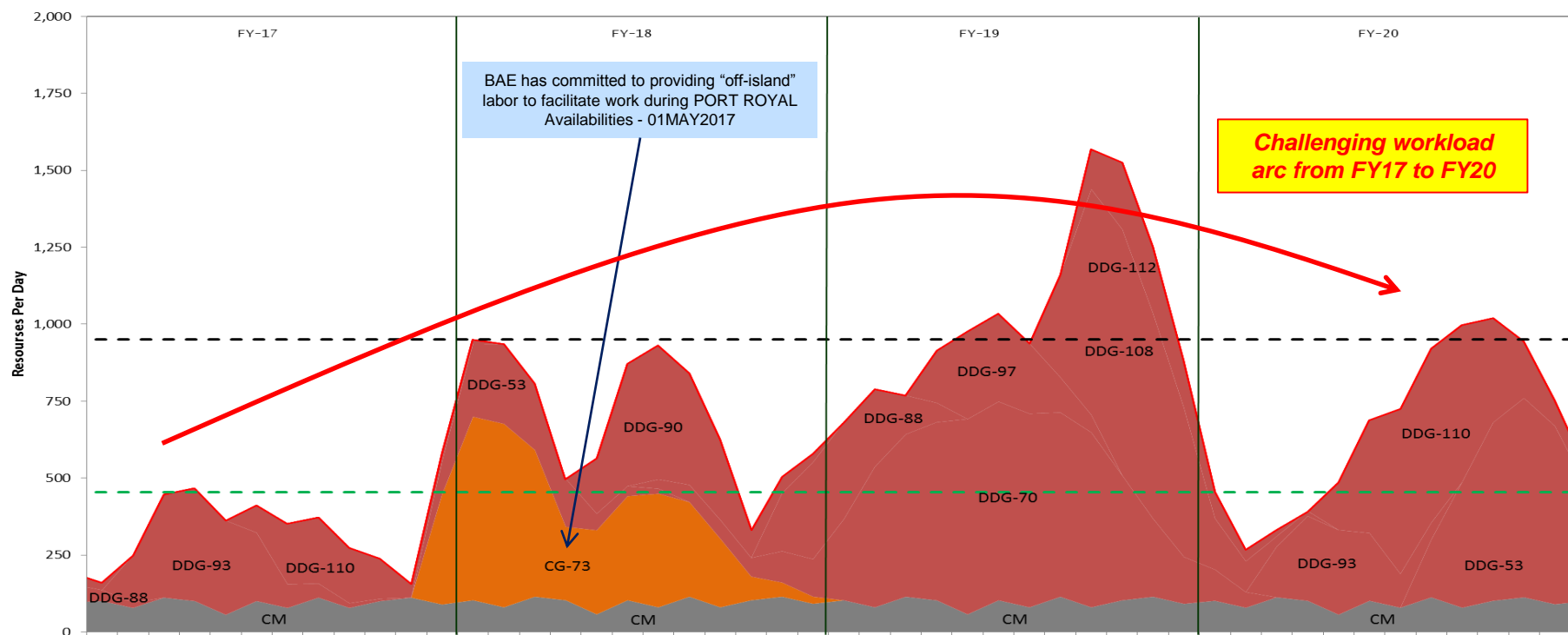
Green Dash Line: 3-Year Historical Workload Average = 1124 RPD
Black Dash Line: Industry Provided SURGE Capacity = 1800 RPD

HRMC Private Sector Workload Forecast with MOD estimates (No AIT) FY17-FY20 As of 21 JULY 2017

Workload Color Legend CM CG DDG

Last Update: 07/21/2017

HRMC Private Sector Workload Forecast Estimate with MOD (no AIT) FY17-FY20 Baseline as of 21 JULY 2017



Total TYCOM, CM & MOD FY Mandays	86,697	176,127	262,375	169,219
-------------------------------------	--------	---------	---------	---------

Average TYCOM, CM & MOD FY Mandays	340	703	1,041	665
---------------------------------------	-----	-----	-------	-----

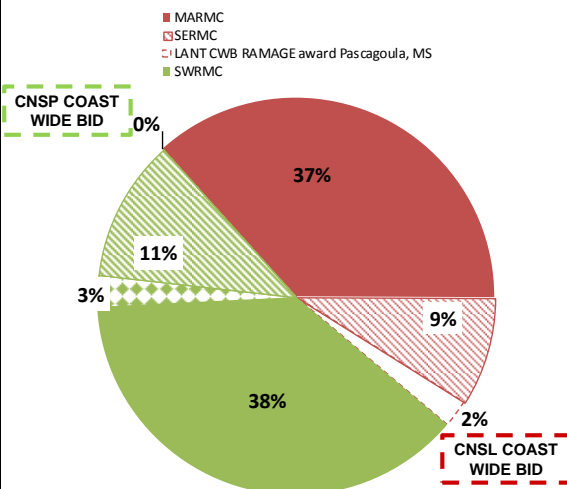
Green Dash Line: 3-Year Historical Workload Average = 454 RPD

Black Dash Line: Industry Provided SURGE Capacity = 950 RPD

FY17 - FY20 Port Loading by Coast (PERCENT)

RMC	MAN-DAYS
FY17 TOTALS	
MARMC	1,242,589
SERMC	299,143
LANT CWB RAMAGE award Pascagoula, MS	76,282
SWRMC	1,287,524
HRMC	86,697
NWRMC	390,457
PAC CWB	0
FY18 TOTALS	
MARMC	1,374,320
SERMC	327,590
LANT CWB	450,429
SWRMC	1,415,233
HRMC	176,127
NWRMC	370,198
PAC CWB	362,264
FY19 TOTALS	
MARMC	949,122
SERMC	348,615
LANT CWB	447,932
SWRMC	1,032,464
HRMC	262,375
NWRMC	335,789
PAC CWB	949,641
FY20 TOTALS	
MARMC	1,286,918
SERMC	244,789
LANT CWB	652,873
SWRMC	1,114,697
HRMC	169,219
NWRMC	365,242
PAC CWB	870,109

FY 17 PORT LOAD



FY17

EAST COAST: 48%
WEST COAST: 52%

ALL AWARDED FY17 CWB SHIPS (6) WERE AWARDED TO THEIR RESPECTIVE HOME PORT, WITH THE EXCEPTION OF USS RAMAGE (DDG 61).

CWB EAST COAST TO AWARD: 0
CWB WEST COAST TO AWARD: 0

FY18

EAST COAST: 48%
WEST COAST: 52%

CWB EAST COAST TO AWARD: 5
CWB WEST COAST TO AWARD: 5

FY19

EAST COAST: 40%
WEST COAST: 60%

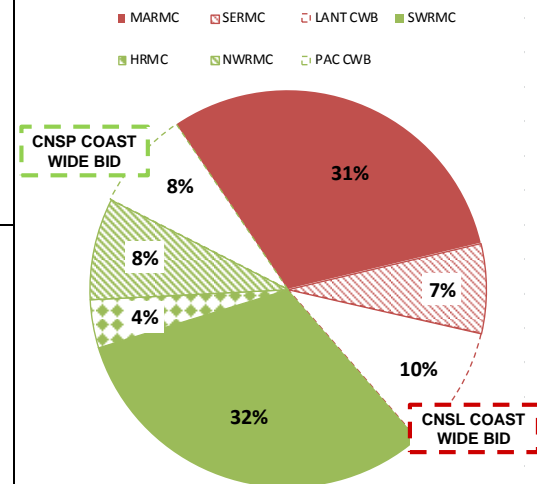
CWB EAST COAST TO AWARD: 7
CWB WEST COAST TO AWARD: 6

FY20

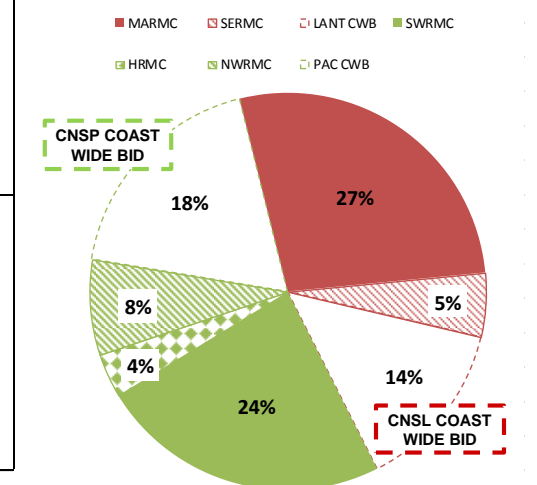
EAST COAST: 46%
WEST COAST: 54%

CWB EAST COAST TO AWARD: 5
CWB WEST COAST TO AWARD: 6

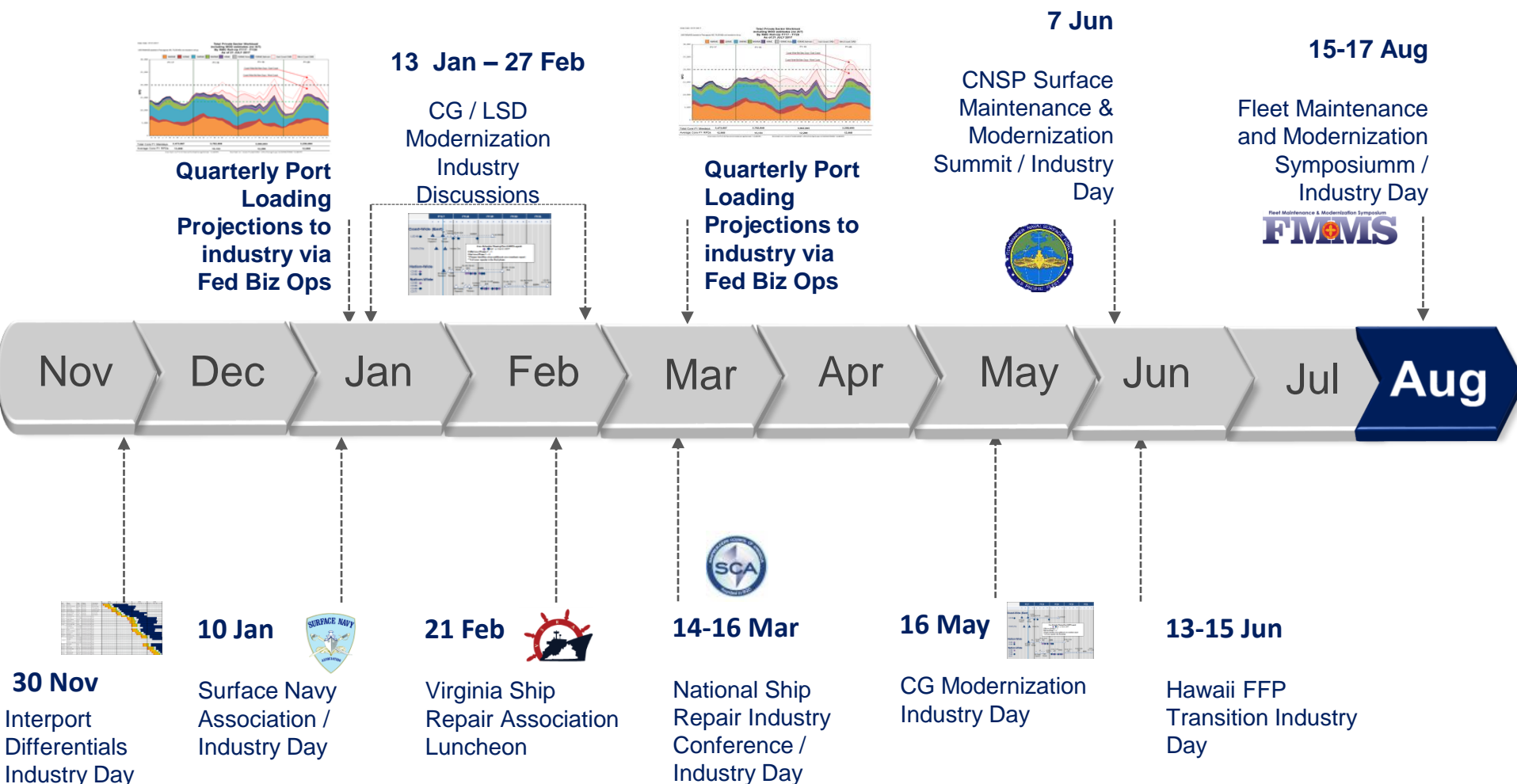
FY 18 PORT LOAD



FY 20 PORT LOAD



Navy – Industry Engagements



Continued Engagement Critical Tenant to Success

Summary

- Priority 1: On-time, on-budget delivery
- Focused on accurate workload forecasts
- Transparent process with Industry through continued dialogue and release of quarterly workload curves
- Executing Fixed Priced Availabilities
 - Executing Coast Wide Bid strategy for avails > 10M
- "Performance to Plan"
 - Managing change and adhering to schedules
 - Risk Management discipline



CNSF Maintenance & Modernization Summit Overview

*DESIGN, BUILD, DELIVER AND MAINTAIN
SHIPS AND SYSTEMS ON TIME AND ON
COST FOR THE UNITED STATES NAVY*

EXPAND THE ADVANTAGE



Mr. Dave Hulse

Background

- **Third Maintenance & Modernization Summit hosted by VADM Rowden**
 - NOV 2014, FEB 2016, and JUN 2017
 - Focus and format has evolved over the three events
- **Chartered under Surface Team-One**
- **Opportunity for senior maintenance community stakeholders to assess our performance and agree on the actions needed to drive improvement.**
 - Type Commanders: VADM Rowden; RADM Piercey
 - NAVSEA: VADM Moore, RADM Galinis, RADM Neagley, RDML Downey
 - Fleet: RADM Whitney, RDML Williamson
 - OPNAV: MajGen Owens
 - NAVSUP: Mr. Bill Bikert
 - Industry Leadership

Agenda Overview

Day One: NAVSEA #1 Priority – On Time Delivery

- Surface Requirements / Planning
 - Availability Duration, Scorecards
 - Industrial Capacity/ Dry-dock Availability Issues
- Surface Contracting
 - Firm Fixed Price Implementation & Performance
 - Coast Wide Bid Lessons Learned/ Barriers
- Surface Execution
 - Risk Management
 - Controlling Growth, RCC Cycle Time, Speed of Technical Decisions

Day Two: Industry Day and Current Readiness

- Industry Collaboration
- Current Readiness
 - CSMP
 - CMAV/Emergent Work Processes

Day Three: TYCOM Focus Areas & LCS

- Readiness Indicators
- LCS
 - Maintenance Execution – Metrics and Process Compliance; CONUS vs OCONUS
 - Modernization

Selected Actions

- **Coast-Wide Bid**
 - Evaluate Options related to the threshold for coast-wide solicitation (shorter vs longer) and codify process for solicitation if over/under legal threshold (10 Months)
- **Dry Dock Capacity**
 - Conduct Comprehensive Assessment of Navy-Wide Dry-Dock Demands
 - Evaluate engineering/logistic opportunities to create virtual dry-dock capacity
 - Initiate studies of NAVBASE San Diego graving dock and ability to restore floating dock at MOLE pier
- **Availability Execution**
 - Review options for improving speed of change to include potential increase in local deck-plate authority
 - Evaluate deck-plate QA surveillance trends
 - Conduct systematic NAVSEA Standard Item Review

Selected Actions

- **PACNORWEST**

- Review Opportunities for private industry to support conventional work on subs and carriers and applications to other regions.

- **Contracting/Funding**

- Reevaluate upward obligations funding thresholds; recommend revised thresholds/process improvements.
- Review industry input concerning proposed contracting milestone changes that scale bid cycle duration and contract award to contract value.
- Evaluate shifting AIT contracts from Cost Plus to FFP
- Evaluate contracting/procedural options (ie. Split CLIN) for minimizing delays due to funding instability due to CRs and FY changes.

Questions?



*DESIGN, BUILD, DELIVER AND MAINTAIN
SHIPS AND SYSTEMS ON TIME AND ON
COST FOR THE UNITED STATES NAVY*

Contracting Update

EXPAND THE ADVANTAGE

CDR Tommy Neville

15 Availabilities

MAC-IDIQs & Delivery Order Competitions

(CNO Availabilities < 10 Months) Time Now

Norfolk Complex MAC – Awarded May 2015 [BAE, NASSCO, MHI]					FY16						FY17						FY18																	
Hull	Name	Type	Status	Contractor	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
DDG 107	GRAVELY	SRA1-2	Awarded	MHI																														
DDG 84	BULKELEY	SRA2-2	Awarded	NASSCO																														
CG 69	VICKSBURG	SSRA1	Awarded	BAE																														
DDG 87	MASON	SRA2-2	Awarded	MHI																														
LSD 41	WHIDBEY ISLAND	PMA3-3	Awarded	MHI																														
DDG 94	NITZE	SRA2-1	Awarded	MHI																														
DDG 103	TRUXTUN	DSRA1	Awarded	NASSCO																														
CG 56	SAN JACINTO	SRA4-1	Source Selection	TBD																														
CG 55	LEYTE GULF	SRA4-1	Source Selection	TBD																														
LHD 5	BATAAN	PMA	Source Selection	TBD																														
DDG 55	STOUT	SRA	Source Selection	TBD																														
LSD 50	CARTER HALL	PMA3-2	Planning	TBD																														

					FY16						FY17						FY18																	
San Diego Complex MAC - Awarded Dec 2015 [BAE, NASSCO, CMSD]					A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
DDG 106	STOCKDALE	DSRA1	Awarded	NASSCO																														
CG 53	MOBILE BAY	SRA3-2	Awarded	CMSD																														
DDG 73	DECATUR	SRA1-2	Awarded	BAE																														
DDG 111	SPRUANCE	SRA2-1	Awarded	NASSCO																														
CG 63	COWPENS	SSRA2	Awarded	NASSCO																														
CG 65	CHOSIN	SSRA1	Awarded	CMSD																														
LPD 25	SOMERSET	SRA1-1	Awarded	NASSCO																														
CG 71	CAPE ST. GEORGE	SSRA1	Source Selection	TBD																														
DDG 91	PINCKNEY	SRA2-1	Planning	TBD																														

Mayport MAC – Awarded Nov 2016 [BAE, NASSCO, Colonna, East Coast Repair, Tecnico, North Florida]					FY16						FY17						FY18														
					A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
DDG 82	LASSEN	DSRA	Awarded	BAE																											
CG 58	PHILIPPINE SEA	DSRA	Planning	TBD																											
LHD 7	IWO JIMA	PMA2-2	Planning	TBD																											
DDG 68	THE SULLIVANS	SRA3-2	Planning	TBD																											

MAC Contract Strategy - Status

Geographical Area	Type	Planned Award (Est.)	Notes:
Norfolk	Complex	Awarded (5/2015)	
Norfolk	Non-Complex	~ 8/2017	Small Business Set-Aside
San Diego	Complex	Awarded (12/2015)	
San Diego	Non-Complex	Awarded (5/2017)	Small Business Set-Aside
Mayport	Complex	Awarded (11/2016)	
Mayport	Non-Complex	Awarded (11/2016)	
PACNW	Complex	~ 12/2017	
PACNW	Non-Complex	~ 12/2017	Small Business Set-Aside
Hawaii	Complex	~ 6/2018	Industry days held. Acquisition Plan in development.
Hawaii	Non-Complex	~ 6/2018	Industry days held. Acquisition Plan in development.
Coast/Nationwide	Complex	~7/2018	Avails over 10 months are currently executed as "stand-alones."

Three types of MAC contracts: Complex; Non-Complex; Coast/Nationwide

Contracting Initiatives for On Time Delivery

- **Monetary Incentive Pilot**
 - Incentivizes early completion of milestones and delivery

USS EXAMPLE SHIP 1

Step	Step Description	Incentive Value/Day (Max 7 days)	Incentive Cap	Turnover 1 Days Early	Turnover 2 Days Early	Turnover 3 Days Early	Turnover 4 Days Early	Turnover 5 Days Early	PCD Days Early	Example Incentive Earned
Step 1	Smallest value early across all milestones *	\$100,000	\$700,000	2	1	9	3	7	5	\$100,000
Step 2A	Only on Milestone 2 **	\$75,000	\$525,000	N/A	1	N/A	N/A	N/A	N/A	\$75,000
Step 2B	Only on Milestone 3 **	\$100,000	\$700,000	N/A	N/A	9	N/A	N/A	N/A	\$700,000

* All must be early to be eligible under Step 1

\$1,925,000

\$875,000

** Independent of other steps / milestones

USS EXAMPLE SHIP 2

Incentive Description	Incentive Value/Day (Max 5 days)	Incentive Cap	Turnover 1 Days Early	Turnover 2 Days Early	Turnover 3 Days Early	Turnover 4 Days Early	Turnover 5 Days Early	Turnover 6 Days Early	Turnover 7 Days Early	Actual Incentive Earned (as of 5/9/17)
Only on Milestone 1 *	\$30,000	\$150,000	5	N/A	N/A	N/A	N/A	N/A	N/A	\$150,000
Only on Milestone 2 *	\$30,000	\$150,000	N/A	5	N/A	N/A	N/A	N/A	N/A	\$150,000
Only on Milestone 3 *	\$30,000	\$150,000	N/A	N/A	4	N/A	N/A	N/A	N/A	\$120,000
Only on Milestone 4 *	\$30,000	\$150,000	N/A	N/A	N/A	5	N/A	N/A	N/A	\$150,000
Only on Milestone 5 *	\$30,000	\$150,000	N/A	N/A	N/A	N/A	5	N/A	N/A	\$150,000
Only on Milestone 6 *	\$30,000	\$150,000	N/A	N/A	N/A	N/A	N/A	3	N/A	\$90,000
Only on Milestone 7 *	\$20,000	\$100,000	N/A	N/A	N/A	N/A	N/A	N/A	2	\$60,000

*Independent of other milestones

\$1,000,000

\$870,000

- **Quality Assurance Surveillance Plan (QASP)**
 - Assures deliverables are timely, adequate, and complete.
 - Assures performance is meeting contract requirements.
 - Deliverable/Assessment areas:
 1. Schedule and Associated Reports per NAVSEA Standard Item (NSI) 009-60
 2. Milestones for Certain Reports per Contract Section C paragraph 3.4
 3. Method C & D Corrective Action Reports (CARs)
 4. Accuracy of Condition Found Reports (CFRs)
 5. Change Order Price Analysis (COPA) submission to Government
 6. Integrated Logistics Support (ILS) & Provisioning Technical Data (PTD) Documentation

- **Liquidated Damages (LDs)**
 - Application:
 - Applies to interim milestones and contract delivery date
 - Calculation:
 - Calculated prior to RFP release based on anticipated damages (harm) to the Government.
 - Placed in contract at specific amounts per day, per milestone.
 - Importance:
 - LDs ensure shipyard contract milestones are met so Government has time to complete testing to meet the scheduled end of availability date after contractor delivers the vessel.



LCS Maintenance Execution Strategy

*DESIGN, BUILD, DELIVER AND MAINTAIN
SHIPS AND SYSTEMS ON TIME AND ON
COST FOR THE UNITED STATES NAVY*

EXPAND THE ADVANTAGE



**Ms. Robin Coady
CAPT Juan Orozco
CDR Joe Saegert**



LCS Maintenance Execution Strategy

August 2017





BLUF



- The LCS maintenance model is different. It accomplishes the same maintenance as a traditional ship while accommodating a minimum-manned crew
- The LCS maintenance model is a vital part of LCS Wholeness, which gives high deployability at low cost
 - 50% of LCS deployed at all times vs 20% for DDG/CG
 - 16 month deployments improve operational continuity
- LCS is integrated into Fleet's Surface and Expeditionary Warfare Maintenance Management Committee (SEWMMC) process



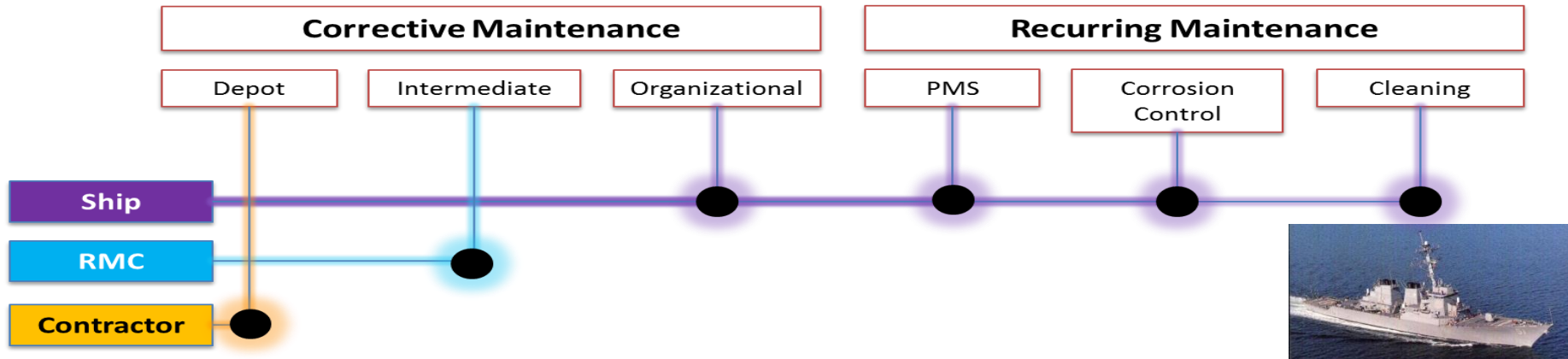
Maintenance Strategy

- Execute maintenance requirements with off-ship organizations. Similar strategies have been tried before with the FFG-7, PC-1, and PHM-1 class ships
- Maintenance Planning: conducted by the Material Support Team. Members include:
 - LCSRON
 - TYCOM (Port Engineer)
 - Ship's Force
 - Regional Maintenance Center
- PMS Admin: PMS Deck is managed by LCSRON and is uploaded to the ships week-to-week through a synchronized database
- Maintenance Execution: some scheduled maintenance (PMS and corrective) is accomplished by contractors during scheduled time inport:
 - Tasks requiring tools, HAZMAT, or skills not present on the ship/crew
 - Low-skill tasks that are too labor-intensive for the crew to accomplish

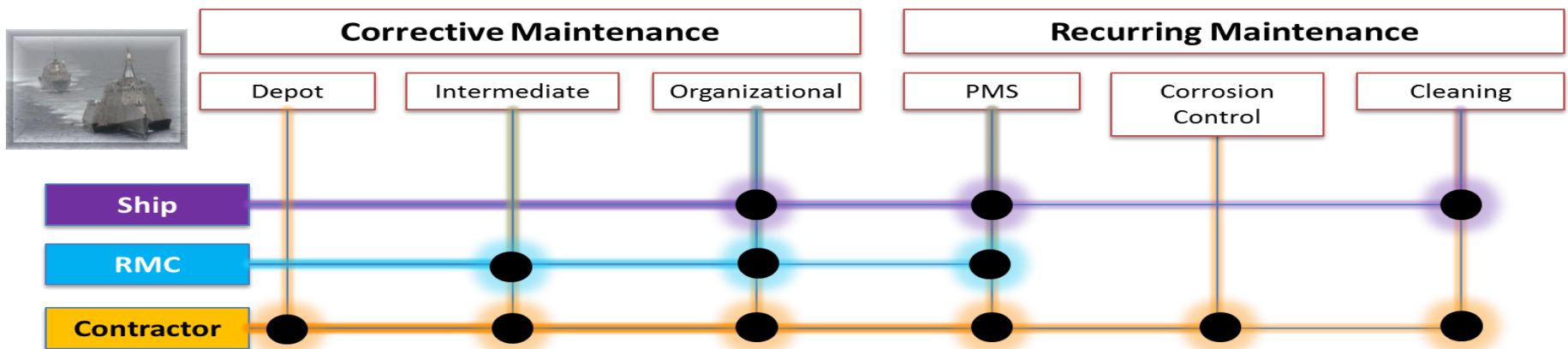
LCS minimum-manning requires planning, admin and some maintenance to be done by off-ship organizations

Maintenance Comparison

Traditional Fleet Maintenance



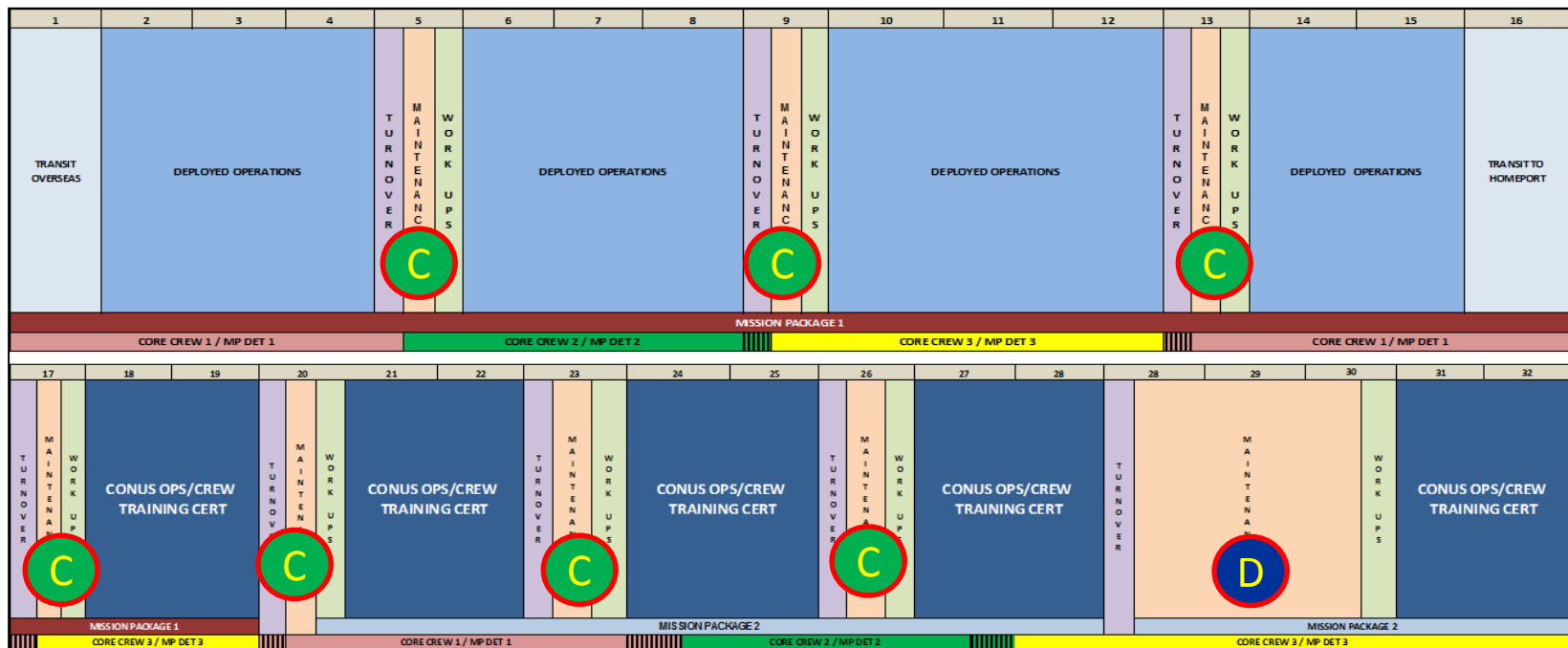
LCS Maintenance Model



All the same maintenance gets accomplished

Maintenance Cycle

- C** Continuous Maintenance Availability (CMAV): CM periods (with concurrent PMAVs) are scheduled once every four months, whether deployed or CONUS, and are accomplished by RMC and U.S. contractor teams. A CMAV is normally executed during each core crew turnover
- D** DSRA / SRA(d): scheduled around dock availability and deployment requirements, once every ~32 months
- Preventative Maintenance Availability (PMAV): PM periods are scheduled every 4-6 weeks and accomplished by RMC and U.S. contractor teams (not shown below due to scale)
- Windows of Opportunity: work can be scheduled to take advantage of any planned inport periods.





Maintenance Planning & Programming



- The Surface and Expeditionary Warfare Maintenance and Modernization Committee (SEWMMC) consists of
 - TYCOMS
 - SPAWAR
 - US Fleet Forces
 - NAVSEA
 - PACFLT
 - OPNAV N96
- The SEWMMC meets semi-annually to
 - Assess force maintenance requirements
 - Prioritize maintenance inputs for the POM
 - Document the fleet maintenance investment strategy in the Surface and Expeditionary Warfare Maintenance and Modernization Plan (SEWMMP)
 - Establish Action Groups to provide address specific maintenance topics
 - Review and incorporate Surface TYCOM Advisory Requirements (STAR) Board recommendations into the SEWMMP as appropriate



SWRMC PMAV Planning Milestones



Key Planning Milestones

- A-120: LCSRON 1 submits WP to SWRMC
- A-90: SWRMC provides WP to NASSCO
- A-50: Prime reconciles WP in Maximo
- A-30: 100% Lock & Stakeholders Meeting
- A-7: Prime Submit Arrival Report
- A-0: Execute PMAV
- C+7: Hold Out Brief

Characteristics

- Duration: 5 days
- Scope: 200-1000 work items
- Periodicity: Monthly

- MSMO Contract moving to MAC-IDIQ in FY18
- PMAV milestones are not mandated by the JFMM; they are determined locally



SERMC PMAV Planning Milestones



Key Planning Milestones

- A-154: 100% checks locked
- A-105: Solicit bids
- A-75: Submit bids
- A-63: Award Delivery Order
- A-0: Execute PMAV
- C+2: KTR Report Maintenance Completion

Characteristics

- Duration: 5 days
- Scope: Data pending
- Periodicity: Monthly

- MAC-IDIQ Contract
- PMAV milestones are not mandated by the JFMM; they are determined locally



PMAV Execution Challenges

- Planning and Scheduling
 - Duplicative work orders issued
 - At-sea checks cannot be accomplished in-port
 - “R checks” (situational requirements) runtime not yet met and unknown at order issue
- Conflicting Maintenance
 - Corrective repair taking priority
 - Too much maintenance ongoing in area of PMS check
 - Tag Out
- Material
 - Parts not on hand
 - EDD after PMAV end date



SWRMC CMAV Planning Milestones



Key Planning Milestones

- A-60: 100% lock
- A-50: 100% Price and Estimate
- A-45: Publish Package
- A-35: Cost Proposal
- A-18: Definitized
- A-0: Execute CMAV
- C+7: Hold Out Brief

Characteristics

- Duration: Average 14 days
- Scope: Average 40-80 work items
- Periodicity: Every 4 Months



SERMC CMAV Planning Milestones



Key Planning Milestones

- A-90: 100% D-level WP lock
- A-90: FedBizOpps to Contracts
- A-70: Solicit Bids
- A-40: Submit Bids
- A-15: Award Contract/WP/schedule to KTR
- A-10: Conduct WP Execution Review
- A-0: Execute CMAV

Characteristics

- Duration: Average 14 days
- Scope: Average 40-80 work items
- Periodicity: Every 4 Months



SEC West CMAV/PMAV Execution Lessons Learned



- Assess PMAV planning process via PMS analysis
 - Review planning milestones
 - De-conflicting maintenance during original PMS scheduling
 - Schedule early to ensure material is available
- Continue to ensure C+7 milestone is effective
 - Primary source of accomplishment data and details
- CMAV planning milestones may require review
 - Lead time to procure material following definitization/award
- Need more stability in LCS Port Engineer assignments
 - Grow LCS maintenance and repair expertise
 - Contributes to improved planning
 - Develop hull material history expertise



Sustainment Contracts and Strategy

- SEC West (April 2015 – April 2018)
 - Provides LCS Class repair, maintenance, and modernization execution CONUS and OCONUS for ships homeported and visiting San Diego, CA
 - Includes Preventative Maintenance and Facility Maintenance/Corrosion Control
 - Multi-Ship Multi Option (MSMO) type with some Firm Fixed Priced CLINs
 - Follow-on SEC West is a Multiple Award Contract – Indefinite Delivery Indefinite Quantity (MAC-IDIQ) like SEC East
- SEC East (August 2016 – August 2021)
 - Provides LCS Class repair, maintenance, and modernization execution CONUS and OCONUS for ships homeported in Mayport, FL
 - MAC I (All type of work CONUS/OCONUS) & MAC II (PM and FM/CC CONUS only)
- Planning Yard (August 2014 – August 2019)
 - Provides SID development, SCD maturation, and orders Long Lead Time Material
 - Execution Planning FY18/19
- Execution Planning provides work package development for Continuous Maintenance (CM) execution and CNO Availability execution and orders Long Lead Time Material



Summary



- LCS maintenance is programmed as part of the SEWMMC process, just like any other ship
 - Previous maintenance planning and budgeting for LCS (N4 BAM) based on FFG-7 class historical data
 - Moving forward from POM-17 into POM-18, actual LCS data from testing and deployments have informed ship sheets, SCDs, etc, and will influence the maintenance planning models
- LCS maintenance is executed differently due to manning constraints; more is done by shore based organizations and contractors



Special Project Overview

*DESIGN, BUILD, DELIVER AND MAINTAIN
SHIPS AND SYSTEMS ON TIME AND ON
COST FOR THE UNITED STATES NAVY*

EXPAND THE ADVANTAGE



Mr. Jeff Brooks

VADM Moore Maintenance / Modernization Study

- Analysis of ship maintenance and modernization policies, processes, practices, performance, and management which have a direct impact on successful re-delivery of ships from maintenance availabilities
- Includes all aspects of the maintenance cycle to include work identification, planning, work execution, oversight, certification, and availability completion
- Focused analysis of both Navy and Industry roles and responsibilities throughout the maintenance cycle

**Remove Barriers to On-Time Delivery from
CNO Availabilities**

TOPIC AREAS

- Acquisition and Contract Strategies
- Contract management and governance
- Ship maintenance policies and processes
- Work identification, requirements, and planning
- Workload forecasting and labor resourcing
- Scheduling, workflow, and production management
- Cumbersome and Non-Value added requirements
- Private sector shipyard management
- Project management
- Industrial base management
- Joint Risk management culture
- Navy-Industry relationships

Process Discipline and Performance Accountability

DELIVERABLES

- **Prioritized, time phased list of data driven actionable items to remove barriers to throughput and on-time maintenance**
- **Where policy and process gaps exist, recommendations will be made to revise, replace, or delete existing policies and processes**
- **Where performance related gaps exist, recommendations will be made to improve execution performance at both the organizational and individual level**
- **Recommendations will include proposed action codes or activity, including both Navy and Industry as appropriate**

PLAN of ACTION

- **VADM Moore project announcement**
- **Establish baseline interview list for Navy and Industry**
- **Establish interview question bank**
- **Request documentation and data from process owners**
- **Establish retired flag officer and industry CEO review boards**
- **Conduct interviews**
- **Review policy and process documents**
- **Review data, material readiness metrics, and trends presented at June 2017 surface maintenance summit**
- **Document interview results**
- **Validate all information**
- **Establish barrier removal priorities**
- **Round 2 of interviews (as required)**
- **Convene Flag/CEO review boards**
- **Brief preliminary findings/recommendations to Flag leadership**
- **Provide final report to VADM Moore**

FOCUS AREAS – OPPORTUNITIES

- **Contract and Engineering Change Management – Fast Tracking Opportunities**
- **Relaxing Technical Requirements and Oversight – Calculated and Acceptable Risk**
- **Schedule Management and Assessing the Impact of Change to On-Time Delivery and Throughput**
- **Contracts Governance – Shared Navy/Industry Risk – What is the right model?**
- **Industrial Base Health, Viability, and Responsiveness**
- **Workload Forecasting, Stability, and Predictability**
- **Navy-Industry Partnership and Relationships**

PROPOSED NEAR TERM PILOTS

- **Change Management (Reduce Cycle Time)**
 - 3 ship pilot (one each in SW, SE, and MA)
 - Delegated contract authority to the Project Manager for small contract changes up to \$25K
 - Establishment of Engineering trouble desk for each ship
 - Project Support Engineer (PSE) with delegated technical authority for all minor technical issues
- **Relaxing Technical Requirements/Oversight**
 - Pilot specifics will focus on non-critical systems
 - Calculated and acceptable risk in Oversight, Standard items, Checkpoints, OQE, and Work Certification based on contractor certifications
 - Focus on reduction in minimal value added requirements and burdensome administrative requirements



NAVSEA Standard Item (NSI) Review

*DESIGN, BUILD, DELIVER AND MAINTAIN
SHIPS AND SYSTEMS ON TIME AND ON
COST FOR THE UNITED STATES NAVY*

EXPAND THE ADVANTAGE



**Mr. Dale Hirschman
Mr. Bill Crow**

SSRAC Way-Ahead

- **Industry/Navy review of NAVSEA Standard Items (NSI):**
 - Industry developed NSI review process; provided POA&M to Navy.
 - Draft POA&M received 7/6/17 – POA&M discussed & approved 7/28/17
 - Industry established & assembled NSI Steering Committee to identify industry priorities, mission, and methodology.
 - Completed 8/11/17
 - Mission Statement: *“The mission of the NAVSEA Standard Items Review Industry Subject-Matter-Expert Working Group is to evaluate each Standard Item and provide the government documented feedback with recommendations on how they can be improved by removing non-value added and redundant requirements to enhance on-time delivery.”*
 - Standard checklist & revised SSRAC form used for review

SSRAC Way-Ahead

Fast-Track NSI Review

- **Steering Committee identified 4 NSI for fast-track review as pilot to validate review procedures: 009-093, 010, 081, 120**
- **Pilot NSI Review Process & Completion Dates:**
 - **Industry Steering Committee conducts fast-track review and recommends fact-based changes to validate review & implementation procedures**
 - **ECD: 9/22/17**
 - **SCA, Local SRAs & Industry Leaders conduct fast-track review of Steering Committee recommendations**
 - **ECD: 10/6/17**
 - **Navy (SEA-21, CNRMC, RMCs) conduct fast-track review of Industry recommendations and provide feedback to validate process**
 - **ECD: 10/20/17**
 - **Industry & Navy conduct conferencing for discussion of unresolved recommendations**
 - **ECD: 11/3/17**

SSRAC Way-Ahead

Full Industry NSI Review

- **Industry Steering Committee determined grouping of NSI for review and is identifying industry Subject Matter Expert Working Groups (SME WG)**
 - **ECD: 8/18/17**
- **SME WG meet to review all NSI & recommend specific, fact-based changes; will ensure all local SI are identified, reviewed, and included for recommendation.**
 - **ECD: 11/3/17**
- **Navy conduct review of change proposals to provide initial response to Industry NSI recommendations.**
 - **ECD: 2/26/18**
- **Nay & Industry provide review process status update and to-date accomplishments at NSRIC.**
 - **ECD: March 2018 (Exact NSRIC dates TBD)**
- **Complete Industry/Navy meetings for discussion of any unresolved NSI recommendations.**
 - **ECD: 4/30/18**
- **Presentation of NSI change results during MegaRust.**
 - **ECD: June 2018**



Back up Slides

*DESIGN, BUILD, DELIVER AND MAINTAIN
SHIPS AND SYSTEMS ON TIME AND ON
COST FOR THE UNITED STATES NAVY*

EXPAND THE ADVANTAGE

Mr. Dale Hirschman
Mr. Bill Crow

SSRAC Background

- The Standard Specification for Ship Repair and Alteration Committee (SSRAC) was established in 1970 to carry out the development, revision, and control of standard specifications for non-nuclear surface ships. In accordance with NAVSEAINST 9070.1 (Series), the purpose of the program evolved to include naval ships and craft including nuclear-powered ships and submarines when work is to be performed by Non-Nuclear capable, Non-NAVSEA Note 5000 private shipyards, contractors, or Alteration Installation Teams. This program ensures that appropriate contract language is used in transmitting technical, quality, and environmental/safety requirements to the contractor or AIT.
- The SSRAC is responsible for updating and maintaining the NAVSEA Standard Items (NSI) and Appendix 4-E of Volume VII, Chapter 4, Joint Fleet Maintenance Manual (JFMM). Standard Items are items that establish uniform methods and standards for routine requirements normally invoked in ship repair Work Items.
- The SSRAC typically meets on an annual basis in July to consider changes to the NSI and 4-E; change proposals must be submitted no later than 60 days before the SSRAC meeting for consideration. Representation on the Committee includes Navy activities involved principally in ship repair and modernization, NAVSEA, Surface Force Type Commanders, Regional Maintenance Centers (RMC), Naval Shipyards, and representatives of various private industry ship repair associations.

Industry NSI Review POA&M

START DATE	NLT COMPLETE DATE	ACTUAL COMPLETE DATE	RESPONSIBLE PARTY	ACTION ITEM DESCRIPTION
7/6/17	7/6/17	7/6/17	VSRA Staff	Discuss and receive input for POAM concept with industry experts
7/6/17	7/6/17	7/6/17	Bill Crow, SCA	Provide draft POAM Overview to SCA & Industry Leaders for approval
7/12/17	7/14/17	7/14/17	Bill Crow, VSRA	Provide overview & obtain VSRA Board of Directors & local SRA's POAM approval; Provide POAM to CNRMC & commence assembly of NSI Working Group Committee(s)
6/27/17	7/14/17	7/14/17	Dale Hirschman, CNRMC	Navy provides strawman priority list of recommended NSI for review
8/4/17	8/11/17	8/11/17	Industry Steering Committee	Industry Steering Committee reviews Navy strawman priority list to define industry priorities. Steering Committee meets to define mission and identify methodology, precise schedule, and comprehensive checklist of all NSI. Steering Committee identifies 4 NSI for fast-track review as pilot to validate review procedures.
8/14/17	8/18/17		Industry Steering Committee	Steering Committee determines grouping of NSI for review. Based on groupings, Steering Committee will identify industry Subject Matter Expert Working Groups, which will meet and review NSI to recommend fact-based changes. Ensure all local Standard Items are identified, reviewed, and included for recommendation.
8/21/17	8/31/17		Industry SME WGs	Identified Industry SME WGs hold information session and meet, are briefed on mission and methodology to begin review of NSI to recommend fact-based changes.
9/5/17	9/22/17		Industry Steering Committee	<i>FAST-TRACK: Conduct fast-track review of the 4 NSI identified for pilot (009-093, 010, 081, 120) to validate review & implementation procedures.</i>
9/5/17	11/3/17		Industry SME WGs	Identified SME WGs conduct initial review of ALL NSI to recommend fact-based changes using identified standard methodology and form.
9/25/17	10/6/17		SCA, SRAs & Industry Leaders	<i>FAST-TRACK: Conduct fast-track review of Industry Steering Committee recommendations regarding NSI identified for pilot (009-093,009-010, 009-081, 009-120).</i>
10/9/17	10/20/17		SEA-21, CNRMC & RMCs	<i>FAST-TRACK: Conduct fast-track review of Industry recommendations regarding NSI identified for pilot (009-093,009-010, 009-081, 009-120).</i>
10/23/17	11/3/17		CNRMC, SCA & Steering Committee	<i>FAST-TRACK: Conduct Navy-Industry conferencing for discussion of unresolved recommendations regarding pilot NSI review (009-093,009-010, 009-081, 009-120).</i>

Industry NSI Review POA&M

START DATE	NLT COMPLETE DATE	ACTUAL COMPLETE DATE	RESPONSIBLE PARTY	ACTION ITEM DESCRIPTION
11/3/17	11/5/17		Joe O'Connor, SCA	Reviews initial draft document of recommended NSI changes (including all edits and deletions), and provides to all SRA & Industry leaders for input (changes will be provided as they are completed).
11/5/17	12/20/17		Local SRA & Industry Leaders	Review & provide inputs regarding any additional industry priorities and concerns for SCA compilation. Ensure all local Standard Items are identified, reviewed, and included for recommendation.
12/20/17	1/8/18		Joe O'Connor, SCA	Review and compile finalized Industry-recommended fast-track pilot NSI changes.
1/8/18	1/8/18		Joe O'Connor, SCA	Provide NSI change recommendations to Navy for review.
1/8/18	2/26/18		SEA-21, CNRMC & RMCs	Review Industry-recommended NSI changes.
2/26/18	2/28/18		SEA-21, CNRMC & RMCs	Navy provide initial response to Industry NSI recommendations.
3/1/18	4/30/18		SEA-21, CNRMC, RMCs & SCA / SRAs	Establish and conduct Navy-Industry meetings for discussion of unresolved NSI recommendations (if needed).
NSRIC	NSRIC		CNRMC & SCA	Prepare & provide NSI review update status & accomplishments.
5/1/18	5/31/18		CNRMC & SCA	Schedule & complete Industry / CNRMC Commander's resolution meetings for unresolved NSI recommendations (if needed).
6/1/18	6/5/18		CNRMC & SCA	Industry / Navy final review and approval of NSI implemented changes.
6/5/18	6/6/18		CNRMC & SCA	SCA / CNRMC prepare presentation on changes for Navy-Industry Meeting during MegaRust .
6/7/18	6/9/18		CNRMC Staff	CNRMC staff and commander review & approve presentation for MegaRust of NSI changes.
June 2018	June 2018		CNRMC Staff/SCA	Presentation of results to Navy-Industry Leadership Meeting at the conclusion of MegaRust .



Meeting Wrap Up

*DESIGN, BUILD, DELIVER AND MAINTAIN
SHIPS AND SYSTEMS ON TIME AND ON
COST FOR THE UNITED STATES NAVY*

EXPAND THE ADVANTAGE



CDR Tommy Neville

- **Overview of New Action Items**
- **Questions**
- **Set next Meeting Date**



Back Up

*DESIGN, BUILD, DELIVER AND MAINTAIN
SHIPS AND SYSTEMS ON TIME AND ON
COST FOR THE UNITED STATES NAVY*

EXPAND THE ADVANTAGE

