

MISSION CENTERED MAINTENANCE PLANNING MEETING
NFESC Port Hueneme, CA
6-7 Sept 00

Agenda:

Wednesday – 6 September 2000

Day 1

- 0830 – 0900 Welcome – Capt. Westberg
- 0900 – 0930 Introduction – Al Antelman
 - Review Meeting Objectives:
 - Establish a collaborative partnership
 - Develop an action plan
 - Assign tasking
 - Establish milestones
 - Determine funding levels
- 0930 – 0945 Current Deployment/Status of Condition Assessment Tools – Harry Singh
- 0945 – 1000 CLF Initiatives – CDR Cozier
- 1000 - 1015 CPF Initiatives
- 1015 - 1030 BREAK
- 1030 - 1130 Mission Dependency Methodology – Al Antelman
- 1130 – 1230 Lunch
- 1230 – 1400 Strawman Concept for Mission-Centered Maintenance Planning – Jim Clayton
Unity Consultants
- 1400 – 1430 CORRS
- 1500 – 1600 Group Discussion
- 1600 – 1630 Wrap-Up

Thursday – 7 September 2000

Day 2

- 0830 - 0900 Recap of Day 1 – Al Antelman
- 0900 - 0930 List Requirements
- 0930 - 1015 Partnership Formation – Harry Singh
- 1015 - 1030 BREAK
- 1030 - 1130 Develop an Action Plan
- 1130 - 1230 LUNCH
- 1230 - 1330 Assign Tasking
- 1330 - 1400 Discuss Time Line
- 1400 – 1415 BREAK
- 1415 – 1445 Select Demonstration Sites and Establish Milestones
- 1445 - 1515 Determine Funding Sources/Levels
- 1515 - 1545 Discuss Concerns
- 1545 – 1615 Closing Comments
- 1615 - 1630 Out-Briefing w/ Capt. Westberg (Singh, Cozier & Antelman)

Presentations:

<http://www.nfesc.navy.mil/shore/mcmp/index.htm>

Conference Notes:

Opening Comments:

Capt. Westberg, CO NFESC, opening comments addressed the challenge of prioritizing available maintenance and repair program (RPM) funds to support Navy missions. In addition, Capt. Westberg stated that developing and implementing a Mission Centered Maintenance Planning process was a team effort that would require participation from the fleets, NAVFAC HQ, OPNAV, the EFDs, PWCs and NFESC.

Mission:

- Develop and implement a credible, objective and affordable mission centered maintenance planning process.

Objective:

- To obtain and allocate funds for asset management

Requirements:

- Objective condition assessment tools (EMS)
- Mission Dependency Index (MDI)
- Mission Centered Maintenance Planning (RMF)
- Reliability Centered Maintenance (RCM)
- Risk Management in Facilities (RMF)

Coordination of Effort:

- Need to involve NAVFAC CIO with Facilities Maintenance Integrated Process Team (IPT).
- Need to work with IFMA
- Incorporate the Facilities Sustainment Model (FSM)

Issues:

Harry Singh

1. PWC Norfolk will be the prototype site for Reliability Centered maintenance (RCM)
2. Dam Neck, VA will be the prototype site for evaluating "BUILDER" (an engineering management system developed by USACERL with a portion of the funding provided by NAVFAC). PAVER and ROOFER are currently being used. Other systems under development include HEATER, SEWER, RAILER, WALKER and IMPACT.

CDR Cozier/LANTFLT

1. The LANTFLT needs an objective and credible reporting system. The current focus is at the claimant level – How do we argue condition facility condition in the POM process and then how do we spend the money to reduce the backlog? The problem is that no matter how much money we spend to reduce the backlog, it still keeps on growing. Questions that need to be answered are:
 - a. How good is the critical backlog data?
 - b. Is the process broken?
 - c. What is the definition of "critical"?
2. Need to have a solution in place for POM-04 (Summer 01)
3. Current systems do not provide enough information
 - AIS does not provide enough data
 - BASEREPS are subjective and somewhat meaningless in respect to quantity and condition.
 - IRR is subjective
4. IWARs drives funding, but is not integrated with the AIS.
5. GAO reports that DoD real property management system needs improvement. There is no consistency between services.
6. Need a system that is useful at all levels (PWD/activity/regional/claimant/CNO/DoD. Need to be able to do trend analysis and "what-ifs".

Clyde Kamimoto/PACDIV-PACFLT

1. PACFLT desires a new and better metrics to measure progress. If we give the Regions 10 Mil., will it be spent in the right places. We need to bring objectivity and credibility into the process. We need a consistent methodology that can be managed at the lowest level and that can support data "roll-up".
2. How do we determine what is deferrable or critical?

CDR Cozier – CORRS

1. Both the Army and USMC use the Commanding Officer's Readiness Reporting System (CORRS) as a Facilities Decision Support System. It may be possible and affordable to adapt CORRS for Navy use for POM-04.
2. Disadvantages:
 - No CNO support
 - Relies on NFADB data which is questionable
 - Does not include mission and only focuses on readiness
 - Deterioration model is suspect

- Gaming is possible
 - Subjective conclusions
3. Advantages
- Affordable
 - Can meet POM-04 deadline
 - Outstanding presentation graphics
 - Will be easier to modify CORRS than developing a new system

Study Teams:

Team 1: Bridge to meet POM 04 deadline with CORRS

Team Leader – CDR Cozier

Team Members:

Glenda Shibata/PACFLT
 Harry Singh/NAVFAC
 Federico Sam/SWDIV
 Don Brunner/NFESC63

1. A Bridge to CORRS

- a. Short Term Objectives (6 month deadline)
 - Determine if CORRRS is best choice
 - Determine CORRS limitations and solutions
 - “Sell” the CORRS concept to:
 - CNO N44
 - All claimants
 - Facility Maint IPT
 - Using R&K demonstrations
- b. CNO Concerns
 - Definition of Adequate, Substandard, Inadequate
 NFADB: Scrub asset data, ignore A/S/I (adequate, sub-standard, and inadequate)
 AIS: Scrub deficiency list, convert to FCI; establish A/S/I ranges
 - Cost generated by CORRS not translated into work packages
 - If CORRS is to be a replacement for BASEREP
 - BASEREP is operator assessment (mission?)
 - Operators not expected to agree to an algorithm
 - CORRS has CO’s notepad (comments) ability
 - Add mission impact measurements to CI rating (see proposed BASEREP Checklists.
 - Mission Dependency Index (MDI) link
- c. Actions
 - NFADB Scrub (Fleets
 Inventory
 CPV/PRV
 - CORRS Demo (HS/R&K)
 - Interface w/MAXIMO (EFD)

- AIS to FCI (Fleets/EFD)
- Determine FCI to A/S/I ranges for C ratings (?)
- Link to MDI (NFESC)
 - Execution priority (and C rating) is combination of MDI & CI
 - MDI Survey/web
 - MDI by mission category or by facility?
- Options
 - CORRS now (FAC roll-up) with Priority list of projects
 - Revise weighted algorithm w/in CORRS
- d. Who/What Else?
 - R&K (Vendor/Developer of CORRS)
 - R/C & SAA role
 - Cost to implement
 - Quantity analysis
- e. Plan of Action and Milestones (POAM)
 - < 3 Months
 - Buy in @ CNO/CPF +
 - R&K Proposal
 - Start NFADB scrub
 - MDI data point (DAM Neck & San Clemente Island)
 - AIS to FCI
 - 3-6 Months
 - Start MDI survey
 - MDI weight to IC roll-up
 - Modify CORRS – Beta run at RC/IMC level
 - > 6 months
 - Data evolution/refinement
 - Tool development & implement = CI refinement
- f. Funding:
 - Determine cost from R&K
 - Obtain CNO/Claimant buy-in
 - Share costs – CNO/Claimant share like RSIP process
 - (or FLT's pay directly...)
- g. What's missing
 - Long term use
 - Functionality at RC/SAA level
 - CORRS Link to integration model

Team 2: Team Objective: Tool Development/Deployment

Team Leader – Al Antelman/NFESCC64

Team Members:

Clyde Kamimoto/PACDIV

Bill Merritt/PWC Norfolk

Charlie Schiavino/NFESC63

Curt Kronberg/SWDIV ALNO

Steve Crover/PWC San Diego

Steven Beals/SWDIV56WF

1. Develop and field a MDI survey tool
 - a. Short Term Objectives
 - MS-Access
 - Quality Control – Incorporate validation rules to prevent gaming
 - b. Long Term Objective
 - Web-Based data collection and analysis
 - Integrate with MAXIMO
 - Link MDI to readiness (FCI)
 - c. Who should do it
 - NFESC (Lead)
 - PWC Norfolk/LANTDIV
 - d. Funding: LANTFLT/NAVFAC
 - e. Schedule:
 - Phase I: MS-Access (1st Quarter FY01)
 - Phase II: Web-Based System (4th quarter FY01)
 - f. Action Plan:
 - Complete San Clemente Island “proof-of-concept” by 15 Oct 00
 - Submit proposal to LANFLT
 - Proposed LANTFLT Test Site: Dam Neck, VA (To be accomplished in conjunction with “Builder” demonstration in Nov 00.
 - g. What’s missing: PACFLT involvement

2. Develop a waterfront condition assessment tool (WHARFER)
 - a. Short Term Objectives - Team/Partnership formation : NFESC with the assistance of USACERL would develop, test, evaluate and field WHARFER using software, prediction methods, and condition assessment approaches previously incorporated into BUILDER, ROOFER and PAVER. NFESC will also partner with EFDPA and EFDLAN.
 - b. Long Term Objective - The Navy’s significant waterfront investment dictates that waterfront facility managers should use a simple, objective condition assessment method to identify and prioritize maintenance requirements. WHARFER will use an objective, repeatable condition assessment method in the form of condition indexes to consistently help waterfront facility manager to:
 - Assess current conditions (impact loading)
 - Predict future conditions
 - Establish deterioration rates
 - Determine and prioritize current and long range M&R needs
 - Formulate budgets
 - Measure the effectiveness of M&R
 - c. Who should do it
 - NFESC (Lead)

- LANTFLT
 - PACFLT
 - d. Funding: NAVFAC (Will seek funding from ONR, N46, LANTFLT and PACFLT)
 - e. Schedule:
 - Phase I: Team formation/Buy-in (1st Quarter FY01)
 - Phase II: Develop assessment criteria and metrics (4th quarter FY01)
 - Phase III: Prototype development (FY02)
 - f. Action Plan:
 - Submit funding proposal to NAVFAC (accomplished)
 - Proposed knowledge acquisition sites – Norfolk/San
 - g. What’s missing:
 - ONR (6.2 cost of Ownership Spike) involvement
 - NAVFAC CIO buy-in
3. Tool Specifications
- a. What’s missing:
- Uniform data format – Need to be able to integrate with MAXIMO and other existing systems (AIS, RSIP, FCI, BASEREP, RSAC, IWARS, CORRS “like” and Maintenance Action Plans
 - Multi-Level Output – Base/Region/CINC/Navy/DoD

Team 3: Integration Model

Team leader – Roy Morris

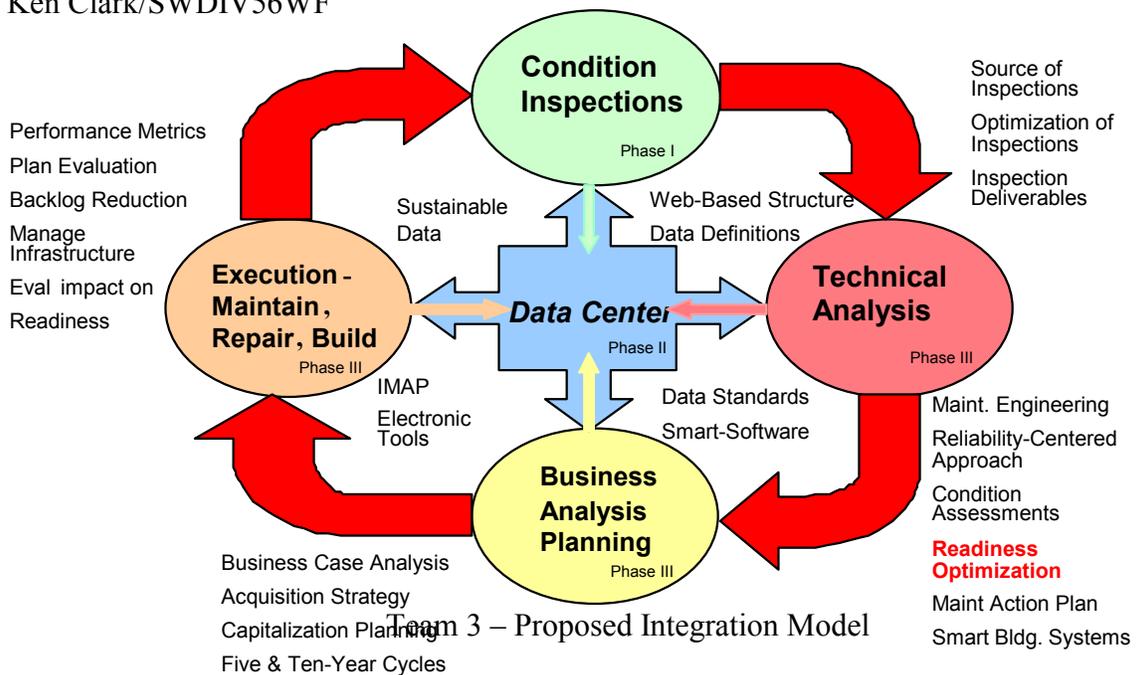
Glen Rogers/PWD North Island

Nolan Araracap/SWDIV56WF

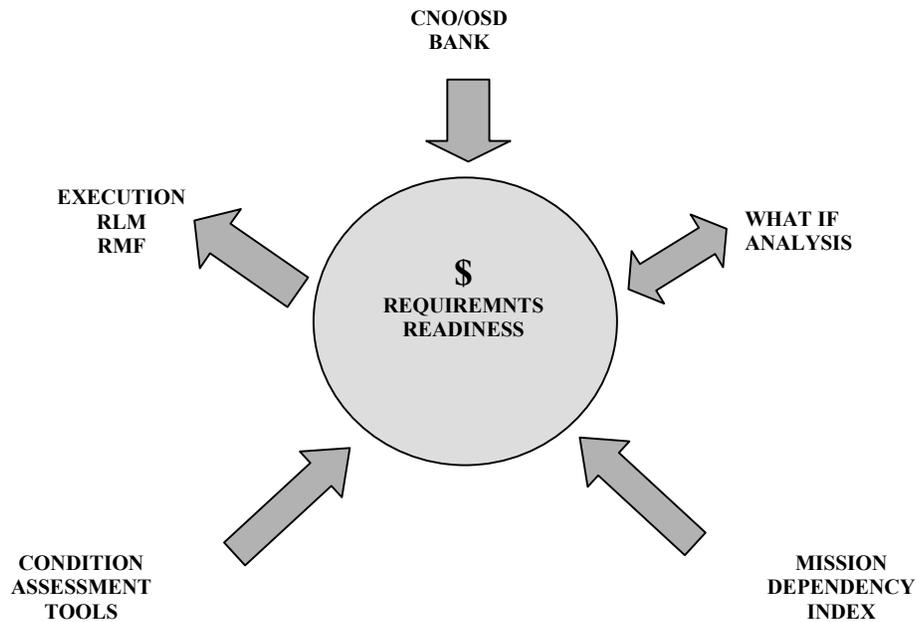
Ken Clark/SWDIV56WF

Preston Springston/NFESC60PM

Jim Osborne/PWC San Diego



Team 3 – Proposed Integration Model



Alternate Integration Model -LANTFLT Perspective (CDR Cozier)

Next Steps

1. Outbrief to NFESC CO
2. Teams
 - Refine concepts
 - Affordability
 - Doability
 - CDR Cozier and Antelman to coordinate CORRS and tool development efforts
 - Look at shorter time frames for deliverables (< 2 years)
 - Continue Implementation Discussions (CDR Crozier LANTFLT + CDR Baker PACFLT).

Out-Brief with Capt. Westberg:

Capt. Westberg stressed that we should coordinate our effort with the NAVFAC CIO and any database tools we develop should provide benefits to the users or there will be no incentive to maintain the databases.