



DEPARTMENT OF THE NAVY
COMMANDER NAVAL SURFACE FORCE
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Canc frp: Feb 05

COMNAVSURFORNOTE 4703
Code N43
19 Aug 04

COMNAVSURFOR NOTICE 4703

Subj: SURFACE SHIP MAINTENANCE PLACEMENT AND OVERSIGHT
BUSINESS RULES - ADDENDUM 2

Ref: (a) COMNAVSURFORNOTE 4703 SURFACE SHIP MAINTENANCE
PLACEMENT AND OVERSIGHT (dtd 09 MAR 04)

Encl:(8) Continuous Maintenance Availability (CMAV) Business Rules
(9) Hotwash Feedback Process Business Rules
(10) Port Level Loading Process Business Rules

1. Purpose. To promulgate Addendum 2 to reference (a). This addendum affects Regional Maintenance Centers (RMCs), Surface Type Commanders (COMNAVSURFPAC, COMNAVSURFLANT) and RMC Ship Maintenance Teams.

2. Background. Detailed information concerning Continuous Maintenance Availabilities (CMAV); Availability Hotwash Feedback Process; and Port Level Loading Process was not included in the initial issuance of reference (a). Enclosures (8), (9) and (10) of this addendum provide this critical information. Insert Enclosures (8), (9) and (10) into Reference (a).

a. Continuous Maintenance Availabilities (CMAV) are an important element of the entitled SHIPMAIN process. CMAVs provide the Maintenance Team with the flexibility required to do the right maintenance at the right time for the right price. CMAVs also provide the agility and required to support the Fleet Response Plan (FRP). Business rules for CMAV scheduling, planning, and execution are found in enclosure (8).

b. One of the basic premises of the SHIPMAIN process is continuous improvement to achieve the very best maintenance business practices. A post-availability feedback process, heretofore referred to as the "Hotwash" process fosters opportunities for continuous improvement by promoting knowledge creation and sharing. Enclosure (9) provides business rules for the Hotwash Process.

c. Until now, the process for scheduling ship maintenance was largely dependent on the intuitive understanding of the premium costs incurred by unfavorable port loading. Because there was no way to quantify the effects of non-optimal port loading, proposed deviations from a baseline port loading scenario could not be objectively measured or compared in order to determine the premiums associated with each scenario. Enclosure (10) provides business rules for managing premiums associated with port loading.

3. Action. RMC Commanders, RMC Maintenance Teams and TYCOM Maintenance Directorates (N43) shall implement applicable changes of these business rules immediately.

//SIGNED//
M. W. BALMERT
Deputy and
Chief of Staff

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21A2 Commander, U.S. Pacific Fleet
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25A1 Mine Countermeasures Divisions And Squadrons
26A1 Amphibious Group LANT
26A2 Amphibious Group PAC
26C Beach Group
16E1 Amphibious Unit LANT
26E2 Amphibious Unit PAC
26J1 Afloat Training Group and Detachment LANT
26J2 Afloat Training Group and Detachment PAC
26T1 Regional Support Group and Detachment, LANT
26T2 Regional Support Group and Organization PAC
26U2 Southwest Regional Maintenance Center
26Z1 Shore Intermediate Maintenance Activity LANT
26Z2 Shore Intermediate Maintenance Activity PAC
28A1 Carrier Group LANT
28A2 Carrier Group PAC
28B1 Cruiser-Destroyer Group LANT
28B2 Cruiser-Destroyer Group PAC
28C1 Surface Group and Force Representative LANT
28C2 Surface Group and Force Representative PAC
28D1 Destroyer Squadron LANT
28D2 Destroyer Squadron PAC
28F2 Logistics Group Western Pacific
28J1 Combat Logistics Squadron LANT
28L1 Amphibious Squadron LANT

28L2 Amphibious Squadron PAC
29A1 Guided Missile Cruiser LANT (CG)
29A2 Guided Missile Cruiser PAC (CG)
29C1 Patrol Coastal LANT (PC)
29C2 Patrol Coastal PAC (PC)
29E2 Destroyer (DD) LANT, 963 Class 29E2 Destroyer (DD) PAC 963
Class
29F1 Guided Missile Destroyer LANT (DDG)
29F2 Guided Missile Destroyer PAC (DDG)
29AA2 Guided Missile Frigate LANT (FFG)
29AA2 Guided Missile Frigate PAC (FFG)
30 Mine Warfare Ships
31A1 Amphibious Command Ship (LCC) LANT
31A2 Amphibious Command Ship (LCC) PAC
31G1 Amphibious Transport Dock LANT (LPD)
31G2 Amphibious Transport Dock PAC (LPD)
31H1 Amphibious Assault Ship (LHA) LANT
31H2 Amphibious Assault Ship (LHA) PAC
31I1 Dock Landing Ship LANT (LSD)
31I2 Dock Landing Ship PAC (LSD)
31N1 Multi-Purpose Amphibious Assault Ship LANT (LHD)
31N2 Multi-Purpose Amphibious Assault Ship PAC (LHD)
32H1 Fast Combat Support Ship LANT (AOE)
32H2 Fast Combat Support Ship PAC (AOE)
32X1 Salvage Ship LANT (ARS)
32X2 Salvage Ship PAC (ARS)
32DD1 Submarine Tender LANT (AS)
32DD2 Submarine Tender PAC (AS)
32KK Miscellaneous Command Ship (AGF)
A1J1L PEO SHIPS (PMS400/PMS377/PMS325)
FB30 SHIP REPAIR FACILITY (NSRF Yokosuka, Japan)
C31G Ship Repair Facility Detachment, PAC (Sasebo, Japan)
FA8 Fleet Technical Support Center LANT
FB8 Fleet Technical Support Center PAC
FB29 Naval Intermediate Maintenance Facility PACNORWEST
FKA1G Sea Systems Command (SEA 04/SEA 02)
FKP7 Shipyard (PSNSY, PHNSY, NNSY only)
FKP8 Shipbuilding, Conversion And Repair, USN
FT88 Engineering Duty Officer School
FT43 Surface Warfare Officers School Command
SURFMO Yokosuka, JA
SURFMO Sasebo, JA

Continuous Maintenance Availability (CMAV) Business Rules

1. Background. The purpose of these business rules is to provide guidance for Continuous Maintenance Availability (CMAV) scheduling, planning, and execution.
2. Concept. Continuous maintenance is intended to be accomplished without the incurrence of Late Work or Port Loading Premiums. In fact, Continuous Maintenance should be scheduled and executed in a manner that will avoid such premiums. Continuous Maintenance can be accomplished in one of two types of CMAVs.
 - a. Scheduled CMAVs ("XAZ" Availabilities) are normally two to six weeks in duration and are nominally scheduled once per non-deployed quarter.
 - b. Unscheduled CMAVs ("XCM" Availabilities) are year-long availabilities scheduled for each ship. Continuous Maintenance is accomplished in distinct maintenance opportunities throughout the year when the ship is not in a XAZ availability.
3. CMAV Business Rules. These business rules shall apply to all (scheduled XAZ and unscheduled XCM) CMAVs:
 - a. Regional Maintenance Center (RMC) (or Naval Shipyard if applicable) shall be assigned as the Naval Supervising Activity (NSA) for all work accomplished in CMAVs. Note: The Joint Fleet Maintenance manual (JFMM) does not currently recognize a NSA for non-CNO availabilities, but rather defines the role of a Lead maintenance Activity (LMA). Because the entitled process has the potential to result in more complex non-CNO availabilities, a NSA will be assigned for all surface ship CMAVs.
 - b. CMAVs shall be executed in NMD and NEMAIS (in those RMCs where NEMAIS is not currently online the local I-Level management system shall be used).
 - c. Dependent upon the complexity of the scheduled maintenance and/or modernization and the number of maintenance activities involved, the Maintenance Team may include a work item for production scheduling and integration in the work package or bid specs. If this work item is not utilized, then the Maintenance Team NSA Project Manager will perform this function.
 - d. All levels of work (Depot, Intermediate) shall be screened into a single CMAV for a specific availability period. CMAVs shall encompass all work

19 AUG 04

brokered to a scheduled period regardless of the executor. Separate intermediate and depot availabilities shall not be established for the same period of time (except internally to the RMC Production Department as required to facilitate the use of I-Level management systems (NEMAIS, etc)). For example, although an I-level "project" may need to be established in NEMAIS for I-Level work completed during a CMAV, all maintenance shall be integrated into and managed as one availability. These business rules establish CMAVs as the only type of availabilities that will be accomplished on surface ships outside of CNO Availabilities for non-emergent maintenance. The terms FMAV, RAV, TAV are no longer used to describe surface ship maintenance availabilities.

- e. Two different non-emergent availabilities will not be in progress at the same time on the same ship. (CMAVs shall not be scheduled concurrently with CNO Availabilities).
- f. Ships shall not get underway during CMAVs except to shift berths or complete sea trials.
- g. Maintenance which will prevent the ship from being Ready for Sea (RFS) within 96 hours will normally only be screened into scheduled (XAZ) CMAVs.
- h. Multi-Ship / Multi-Option (MSMO) contracts, when in place, shall normally be used for accomplishment of Continuous Maintenance advanced planning and execution. This practice will facilitate true cooperation and participation in Business Case Analysis decisions by the MSMO contractor Maintenance Team Representative. For example, if the MSMO contractor knows that growth work discovered in a CNO availability can be accomplished at a lower cost in a subsequent CMAV, he will be more inclined to present that business case perspective if he knows he will eventually be tasked to accomplish that work in the CMAV. The RMC Commander is authorized to go outside the MSMO contract for CMAV planning and execution if exceptional situations dictate.
- i. For ship classes for which no MSMO contract (or no CMAV CLIN) is in place, RMCs shall award and utilize Indefinite Delivery, Indefinite Quantity (IDIQ) contracts for the execution of Continuous Maintenance. All Firm Fixed Price package preparation and contract award milestones in these CMAV business rules are based on IDIQ contract vehicles. When MSMO Advance

planning CLINs are not in place, CMAV advance planning shall be accomplished by the executing RMC.

4. Scheduled CMAV (XAZ) Business Rules. The following business rules apply to scheduled XAZ availabilities:
- a. Scheduling. Before the start of the fiscal year, as a part of the Maintenance and Modernization Business Plan (MMBP) development, Maintenance Teams will establish notional dates for one XAZ availability for each quarter the ship will be in home port for three continuous weeks or longer. The exact dates will be adjusted later once the schedule is promulgated. CMAVs shall be scheduled by the Maintenance Team through the RMC and TYCOM using the normal Fleet scheduling process. In general, CMAVs will be scheduled to start on the first weekday after arriving in port and will be scheduled to complete one week prior to scheduled underway day. This will result in scheduled CMAVs being at least two weeks in length and reducing premiums paid to rush to complete work prior to underway. CMAVs shall normally not start on weekends or holidays when support for tag-outs and availability start-up is limited. CMAV schedules will be reviewed at each Planning Board for Maintenance (PBFM), and will be adjusted as ships' operational schedules dictate. Adjustment of Scheduled CMAV start dates may be required throughout the year. Scheduled CMAV start dates may not be adjusted "forward" if package preparation and workpackage "lock" Milestone dates would be violated by the new start date.
 - b. Planning. The nominal duration for scheduled CMAVs is no less than two weeks and no more than six weeks. Modernization may be accomplished in scheduled (XAZ) CMAVs provided modernization milestones applicable to CNO availabilities are met for XAZ avails. Modernization planned for XAZ availabilities will be identified in the MMBP before it is submitted for RMC /TYCOM approval.
 - c. Milestones. MSMO milestones are provided in Table 1.

Due	Milestone
A-40	I-level package locked
A-30	D-level package locked
A-20	Conduct WIPR
A-10	Definitize Package

Table 1. MSMO Milestones

19 AUG 04

Firm Fixed price (IDIQ) milestones are provided in Table 2.

Due	Milestone
A-60	D-level Package Locked
A-40	I-level Package Locked
A-40	Solicit Contract
A-30	Bids Due
A-20	Award Contract

Table 2. FFP (IDIQ) Milestones

- d. Execution. A Work Package Integration Review (WPIR), chaired by the NSA and attended by all executing activities and all members of the Maintenance Team shall be conducted at A-20 (MSMO) or A-10 (FFP) to review, prioritize, de-conflict, and validate the CMAV work package. Any shipchecks required by IMA, IDIQ contractor, AIT, MSR/ABR contractor, or others, to support CMAV planning shall be completed prior to the WIPR. If a job screened to a CMAV is not started in that CMAV, it must be moved into another availability. At the discretion of the RMC, emergent work discovered during an XAZ availability may be completed in a concurrent Emergent Maintenance (XEM) availability. A Hotwash meeting / conference will be conducted within 30 days of the CMAV completion for all scheduled CMAVs (XAZ Avails). The Hotwash may be accomplished at a Planning Board for Maintenance for small CMAVs or a separate Hotwash meeting may be required for a successful Hotwash on more complex CMAVs.
5. Unscheduled (XCM) CMAV Business Rules. The unscheduled XCM availability is a yearlong availability for the period 01 October through 30 September. It is to be utilized for maintenance desired to be completed in the fiscal year during windows of opportunity.
- a. Scheduling. XCM availabilities are not to be utilized as holding cues for maintenance items. When operational schedule changes occur early enough to allow the scheduling of a scheduled CM (XAZ) availability without violating the milestones discussed in paragraph 4.c, a new XAZ avail should be

scheduled when possible, rather than executing maintenance in the unscheduled XCM availability.

- b. Planning. I-level maintenance may be brokered into XCM avails. Maintenance items may be accomplished in the XCM availability when scheduled XAZ availabilities cannot be inserted due to length of inport period (less than 3 weeks) or when late identification of maintenance opportunity will not support XAZ milestones. All maintenance accomplished in XCM avails will be planned and specifications developed (just as if the maintenance were to be executed in CNO or Scheduled CM availabilities).

- c. Milestones. All Intermediate and Depot Level work items to be accomplished in XCM CMAV maintenance opportunities shall be fully planned and specifications developed no later than 14 days prior to the start of the maintenance period. The Depot Level package shall be awarded or definitized no later than 7 days prior to the start of the maintenance period. If these milestones cannot be met, the maintenance must be rescheduled to a subsequent XCM Maintenance Opportunity, accomplished in a scheduled CMAV, or accomplished as Emergent Maintenance (if other conditions for emergent maintenance are met).

6. CMAV Metrics. The following Placement and Oversight metrics will be collected to measure the effectiveness of the CMAV process:

- a. Scheduled (XAZ) CMAV Metrics.
 - i. Award On Time Delivery. Scheduled CMAV "On Time Award" is defined as the percentage of time contract award is made on time or early. Specifically, for Firm Fixed Price (IDIQ) CMAVs "on time" is at least 20 days prior to CMAV availability start date; and, for MSMO CMAVs "on time" is at least 10 days prior to the CMAV availability start date.

 - ii. Contract Modification Cycle Time. The contract modification cycle time metric is a measure of cycle time required to process a contract change during execution. It is calculated using a dynamic cycle time measure in days from day request contract change (RCC) is submitted until

19 AUG 04

contract mod is settled and settlement date is documented in NMD.

- iii. Completion On Time Delivery. The CMAV Completion On Time Delivery metric calculates the percentage of occasions when a CMAV availability is completed on or before the CMAV end date as recorded in NMD. This metric is determined by calculating a percentage of CMAV contracts and MSMO CMAV contract Line Items completed on time or early versus total CMAV contracts or MSMO CLINS awarded.
- iv. Availability Churn. The CMAV Availability Churn Percentage is a monthly capture dollar value of work items changed, deleted or added in a CMAV workpackage from contract award until availability completion versus the dollar value of the workpackage at award for all CMAV avails that ended in the current measurement month and the previous two months. This metric is collected by availability and reported one time in the month the availability completes.
- v. Growth and New Work Premiums (GNWP). The GNWP metric is a measure of late work premiums paid as a percent of growth and new work monthly. It does not include authorized work included at the start of the avail as growth reserves for specific spec items or execution of pre-priced option items if executed within the scope and schedule as pre-priced. This metric is collected weekly with each change to the original contract award (FFP) or definitization (MSMO) work package transaction will be reported one time in the data call for the week in which it was settled for scheduled CMAVs.
- vi. CMAV Late Work Premium. The CMAV late work premium metric is a measure of the total dollar value of late work premiums paid for CMAV avails completed in the current month divided by the execution contract award (FFP) or definitized CLIN (MSMO) plus the settled cost of all RCCs for that availability.

b. Unscheduled (XCM) CMAV Metrics.

- i. Unscheduled versus Scheduled CMAV Obligations. Total cumulative dollars obligated in XCM avails

19 AUG 04

as a percent of total CMAV obligations (XCM plus XAZ) obligations calculated each month.

Hot Wash Feedback Process Business Rules

1. Background. The Navy's Sea Enterprise initiative has a stated goal of instituting better business practices as part of the transformational process. Thus, a basic premise of the SHIPMAIN process is continuous improvement to achieve the very best business practices. The Hot Wash feedback process, an integral part of the SHIPMAIN fabric, fosters opportunities for continuous improvement by promoting knowledge creation and sharing. It seeks to connect people to people and people to information to enable process improvements. Indeed, it is essential to understand that the Hot Wash feedback process is not simply about accessing information. On the contrary, this feedback process seeks to provide a balance between recording and codification of explicit knowledge. As with any knowledge transfer initiative, how fast we can reuse, adapt and improve what we know and have learned is crucial to future successes.

2. Concept. SHIPMAIN is committed to establishing the environment, culture and processes required to generate and sustain transformational thinking and action. The Navy has tremendous intellectual capital resident in its' Ship Maintenance and Modernization Community which includes the Sailors on our ships, Regional Maintenance Centers (RMCs), and contractor partners who are on the waterfront. These people are valuable catalysts for continuous improvement. They possess the skills and resources to achieve continuous advances in SHIPMAIN effectiveness. The Hot Wash meeting is not a program review, nor an evaluation of the Maintenance Team or contractor, or a place to assign blame or acknowledge heroism. It is a process review, an evaluation of process execution and a place to resolve process issues to improve process execution.

The Hot Wash meeting will be sensitive to other feedback/review processes, such as the Award Fee Board and Contractor Performance Assessment Report (CPAR). Both of these processes tend to take place longer than one month following the availability in order to fully test all systems once a ship is underway. These business rules recognize the need for consistency between these three feedback processes, and the need for all to exist. As the Hot Wash meetings will most likely occur prior to the Award Fee Board meeting and the CPARS issuance, sensitive issues may arise. The Hot Wash meetings intend to remain focused on process improvement and allow for such sensitive issues to remain in closed sessions or within the scope of the other feedback/review processes.

The Hot Wash Team for each availability is comprised of the Project Maintenance Team (the ship's Maintenance Team augmented by representatives from various organizations added to the team for the availability planning and execution phases). See

attachment (1) for a list of Project Maintenance Team members. The RMC Class Team Leader has been designated as the overall Hot Wash meeting facilitator and will work with the Maintenance Team to ensure a productive meeting. As the Class Team Leader is a central point of contact for all ships within a particular RMC, he will bring continuity to the Hot Wash process and can ensure that feedback is appropriately disseminated and utilized. As the facilitator, the Class Team Leader should consider process issues throughout the execution of the availability and those that have occurred within other avails; he should maintain communication with the Maintenance Team and CFTs in order to ensure a full review. Note that while the Class Team Leader possesses many responsibilities as the facilitator of the Hot Wash meetings, he is to be considered the coordinator and should expect to gain assistance by all stakeholders.

3. Objective. The objective of the Hot Wash feedback process is to implement a systematic strategy by creating a dynamic, people-centered approach used to identify process improvements, which will be shared, and embedded into maintenance and modernization processes. In particular, the Hot Wash meeting as depicted on the chart of attachment (1) is an economical and effective means to identify opportunities to improve the SHIPMAIN processes of requirement identification, work package preparation, placement and oversight, alterations and modernization, and to share the best practices and lessons learned derived from ship availabilities with the Ship Maintenance and Modernization Community.

4. Business Rules

Preparing for the Hot Wash Meeting

- a. Central to the feedback process is a post-availability Hot Wash meeting. This formal meeting is conducted within one month of the availability completion in order to capture information while it is still fresh.
- b. At the ship's Arrival Conference (between A-5 days and A-0), the Class Team Leader will lead a discussion outlining expectations for the post-availability Hot Wash meeting. This discussion is intended to remind the Maintenance Team and key availability stakeholders to maintain a record of potential Hot Wash items during the execution of the availability. This includes a review of the Hotwash business rules, particularly the Availability Feedback Form (see attachment 4).
- c. The ship's Commanding Officer will include in the weekly situation reports any potential issues to be discussed in the post-availability Hot Wash meetings. This will be a

- standard paragraph and used at the end of the availability as a starting point for Hot Wash items.
- d. The RMC Project Manager will include in the monthly availability status report any potential issues to be discussed in the post-availability Hot Wash meetings. This will be a standard paragraph and used at the end of the availability as a starting point for Hot Wash items. (Messages are due no later than the tenth of the month during the availability.)
 - e. At availability completion (C+0), the Class Team Leader will review availability metrics and SHIPMAIN Cross Functional Teams' (CFT) bridge plots. As a part of the metric review, actual MT and availability performance will be compared to SHIPMAIN metric entitlement targets and other measures of customer satisfaction. See attachment (3) for the minimum list of metrics to review.
 - f. Key stakeholders involved with the follow-on availability will attend the Hot Wash meeting for the previous availability either within the ship class, with the same contractor, and/or within the same port. This will be one measure taken to ensure lessons learned are passed on and utilized.
 - g. The Maintenance Team will publish a meeting notice at C-5 (see attachment 2) along with a request to identify both positive and adverse process issues. A Maintenance Team member designated by the maintenance team leader will chair the meeting with the Class Team Leader serving as the Facilitator.
 - h. Feedback should be identified by using the Availability Feedback Form (attachment 4), and should be submitted to the Class Team Leader as early as possible but no later than 15 days prior to the Hot Wash meeting. Each proposed process improvement shall be identified along with the impact and recommended corrective action. Issues describing ship availability best practices and lessons learned may also be identified in order to facilitate follow-on ship availabilities or ship alteration installations.
 - i. Problems identified by the Hot Wash participants, along with the availability metrics, should be analyzed by the Class Team Leader to determine the apparent root causes. These root causes will be grouped under broad headings as listed below (in paragraph k).

19 Aug 04

- j. Everyone who submits an Availability Feedback Form will receive a response from the Hot Wash Team, including a summarization of the issue ranking and any reasons for action/non-action taken via the team minutes.
- k. Using the Standard Barrier Ranking Process (see attachment 5) for issues received, the Class Team Leader will consult with the Maintenance Team to develop the Hot Wash meeting agenda. The focus of the meeting includes SHIPMAIN processes, business rules, metrics, and training. Ship availability process issues/best practices and ideas for improving the installation of ship alterations also may be included in the meeting agenda. Feedback provided and action items determined during the Hot Wash meeting will be published in the minutes and distributed as directed in paragraphs (q)-(s). Specific agenda topics to review include, but are not limited to, items (1)-(8) below. (See attachment 6 for details).

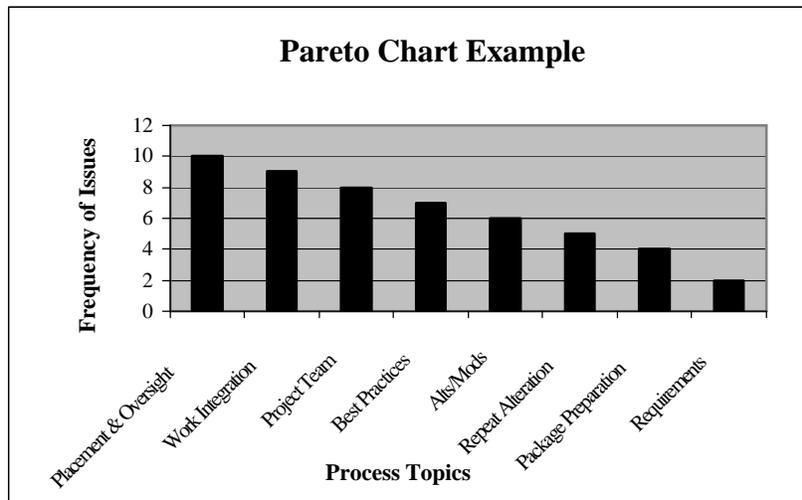
- (1) Placement and Oversight
- (2) Package Preparation
- (3) Requirements
- (4) Project Team
- (5) Alterations and Modernization
- (6) Repeat Alteration
- (7) Work Integration
- (8) Best Practices

Hot Wash Meeting

- l. At the start of the Hot Wash meeting (at approximately C+14), key participants will present a brief overview of the availability process from work identification through execution oversight.
- m. Breakout sessions will be scheduled as necessary in regard to specific issues or concerns. The format is intended to allow people to use their time more effectively and participate in those discussions in which they have interest and expertise. It is important that there be a broad representation, since a single person or organization seldom resolves process issues. The Class Team Leader will identify and invite the appropriate subject matter experts to lead each breakout session and to aid in understanding and developing the recommended process change.
- n. Each breakout session shall have a designated leader, previously identified in the Hot Wash message announcement. The Hot Wash meeting, and any breakout

session, will have an assigned facilitator to foster open discussion while maintaining focus on the meeting objectives. The RMC Business Office will provide facilitators.

- o. The results of the breakout sessions are translated into actionable items that become part of the minutes for the meeting. Reports from the breakout sessions are provided to the entire group of Hot Wash attendees in the appropriate format (see attachment 7). A pareto chart will be utilized to graphically represent where the largest problems exist in the execution of the availability (see below for an example of a pareto chart). This will assist in focusing critical effort toward resolution for the execution of follow-on availabilities and improvement of SHIPMAIN processes.



- p. The Class Team Leader will gain consensus and assign specific actions to the appropriate process owners to manage and coordinate implementation of the process change for resolution. Action item assignment will include who is responsible, what the action is, and when the action completion is expected (see attachment 8). Agenda items that are deemed to have an immediate impact on availability management or execution, such as improving ship alteration installations and availability best practices, should be compiled into a short list for consideration by follow-on availability stakeholders. The Class Team Leader will forward this list to the relevant Maintenance Teams for integration. Additionally, the list will be provided for review and inclusion into Maintenance Team training.

19 Aug 04

Post-Hot Wash Meeting Activity

- q. The RMC Class Team Leader will publish Hot Wash meeting minutes and W3's in the appropriate format (see attachment 9). Once the RMC Business Office posts the minutes on the SHIPMAIN web site (<http://www.spear.navy.mil/SHIPMAIN/>), the Class Team Leader will then send an e-mail message confirming the availability of all Hot Wash minutes and W3's to appropriate points of contact; this includes meeting attendees, CFT action officers, SHIPMAIN process team, metrics team, relevant RMCs, SPAWAR, NAVSEA, PEO SHIPS and CNSL/CNSF N43. The points of contact in each of these teams or commands are responsible for ensuring that key stakeholders receive the minutes and address assigned actions.
- r. Ship class points of contact are different for each of the four ship categories: (1) L-Ships/Command Ships, (2) Combatant Ships, (3) M-Ships, (4) Auxiliary Ships. The respective points of contact (listed in attachment 10) will receive confirmation of meeting minutes for all ships included in the listed category. The points of contact are responsible for ensuring that key stakeholders receive the minutes and address assigned actions.
- s. The SHIPMAIN web site will be organized so that Hot Wash meeting minutes and W3's will be listed by ship class categories. Actions will be extracted from the minutes and displayed by the responsible command or team. Business Rules and process improvements will be posted by categories, as listed in paragraph (k) above.
- t. The appropriate CFT will utilize feedback given during the Hot Wash meeting in regard to process changes, and will incorporate as business rules into CNSF Note 4700 series.
- u. The RMC Commanders and Waterfront Operations Officers will review Hot Wash items on a monthly basis in order to track progress of W3s and AIPs and to identify where assistance is required for resolution. This is intended to complement the monthly Maintenance Team metrics and business plan reviews.
- v. PEO SHIPS is responsible for taking action on cross-organizational process issues that are discussed in Hot Wash meetings. The relevant RMCs are responsible for addressing and following-up on issues that are port related.

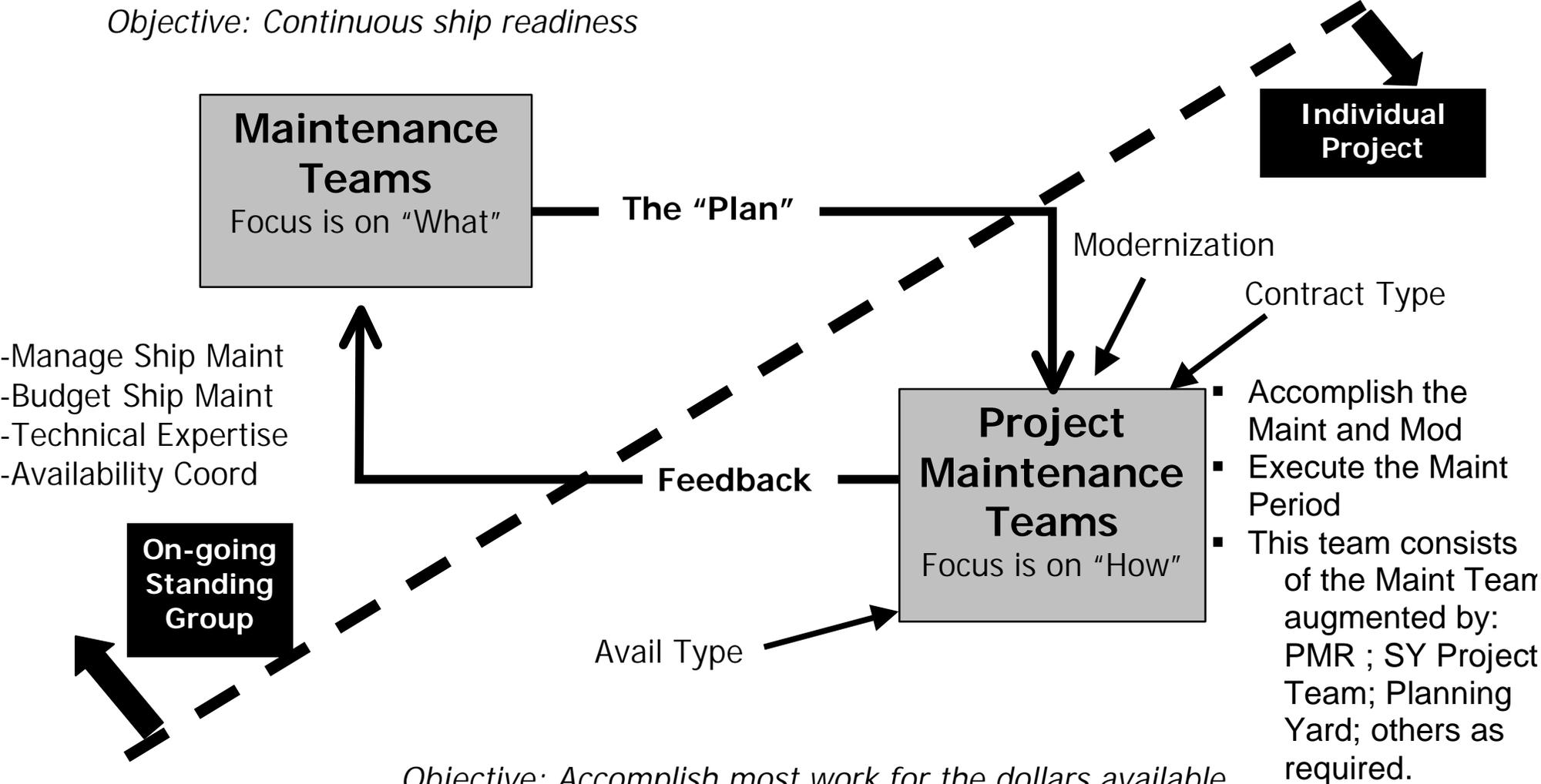
- w. Feedback provided through the Hot Wash process will be collected and included in a final annual report. This report will include information gathered throughout the year from all Hot Wash meetings and the commands or organizations involved, the status of actions assigned at meetings, and resolution that has occurred from such actions. It will address process improvements and issues requesting guidance. The report will be compiled by PEO SHIPS and will be submitted to the appropriate senior leadership at OPNAV.

Index of Attachments

1. Maintenance Team to Project Team Slide
2. Sample Hot Wash Announcement Message
3. Metrics - Candidates for Review at Hot Wash
4. Availability Feedback Form Instructions and Sample Form
5. Standard Barrier Ranking Process
6. Hot Wash Meeting Agenda Details
7. Sample Breakout Team Report
8. Sample W3 Data Table
9. Sample Hot Wash Meeting Minutes / Meeting Attendance List
10. Ship Class Categories

Maintenance Teams to Project Teams

Objective: Continuous ship readiness



Objective: Accomplish most work for the dollars available.

COMNAVSURFORNOTE 4703
19 Aug 04

HOT WASH ANNOUNCEMENT MESSAGE

UNCLASSIFIED

R Date Time Group
FM XXRMC CITY STATE/ /XXX / /
TO
(From Attachment 10)
INFO
(From Attachment 10)

UNCLAS / / N0XXXX / /
MSGUID/GENADMIN/XXRMC CITY STATE/XXX200X / /
SUBJ/USS XX FYXX AVAIL TYPE HOT WASH MEETING/ /
REF/A/DOC/CNSFNOTE 4703/XXX2004
POC/POC NAME/CIV/CODE XXX/LOC:TBD
/ EMAIL: "E" MAIL ADDRESS PHONE # / /
AMPN/REF A IS COMNAVSURFOR NOTICE 4703 SURFACE SHIP MAINTENANCE
PLACEMENT AND OVERSIGHT/(ADD SPECIFIC INSTRUCTIONS FOR INFO TO RMC'S,
PLANNING YARDS AND OTHER SPECIAL INTEREST ATTENDEES) / /
RMKS / 1. THE USS XX (HULL#) FYXX AVAIL TYPE HOT WASH
MEETING WILL BE HELD (DATE-MONTH-YEAR) AT TBD SPECIFIED LOCATION,
ADDRESS/STREET INFORMATION. XXX BOQ RESERVATIONS CAN BE MADE VIA
TELEPHONE AT XXX-XXX-XXXX OR XXX-XXXX.
2. THE PURPOSE OF THE MEETING IS TO REVIEW THE COMPLETED HULL# FYXX
AVAIL TYPE AND IDENTIFY DETAILED PROCESS ISSUES AND RECOMMENDATIONS
THAT SHOULD BE SHARED WITH THE MAINTENANCE AND MODERNIZATION
COMMUNITY. REQUEST ATTENDANCE FROM ACTION ADDRESSEES, SHIPMAIN CFT
PROCESS OWNERS AND ACTION OFFICERS, PROCESS TEAM, METRICS TEAM, SHIP
CLASS POINTS OF CONTACT AND OTHERS TBD.
3. A DETAILED AGENDA, READ-AHEAD INFO AND DIRECTIONS WILL BE SENT
OUT UNDER SEPCOR.
4. HOT WASH MEETING FORMAT:
DATE TBD (DAY)
0800-0810 PROJECT INTRODUCTION
0810-0815 HOT WASH PURPOSE AND GOALS
0815-1015 AVAILABILITY OVERVIEW
1015-1215 AVAILABILITY KEY ISSUES/PROCESS ISSUES
1215-1315 LUNCH
1315-1430 BREAKOUT SESSIONS (AS REQUIRED)
1430-1515 BREAKOUT TEAM REPORTS
1515-1545 IDENTIFY AND ASSIGN W3'S
1545-1600 WRAP-UP, CLOSING AND REMARKS
BREAKOUT GROUPS:
- XXX
- XXX
5. REQ ALCON PROVIDE NAMES OF HOT WASH ATTENDEES TO MSG POC
(E MAIL ADDRESS) BY EMAIL NLT DATE-MONTH-YEAR. / /

METRICS - CANDIDATES FOR REVIEW AT HOTWASH

The following are examples of SHIPMAIN metrics which should be reviewed at the Hotwash. This list is not all inclusive:

CFT 1 (2Ks)

- 2K On Time Delivery (Panel 9)
 - Were 2 Kilos screened and validated in accordance with milestones?

CFT 2

- % Specs Reused (Panel 1)
 - How effectively did we use the master spec catalog?
- % Specs Executed (Panel 4)
 - Was our planning accurate?

CFT3 (Work Items)

- Growth and New Work Premiums (Panel 8)
 - Was Growth and New Work deferred to CM?

CFT4 (Alts and Mods)

- Milestone Conformance (Panel 7)
 - How well did we meet the requirements?
- % Alts Through Process (Panel 8)
 - Were the requirements ready at SOA?

EXAMPLE:

CFT 1 (2Ks for Depot Level Work)

- 2K On Time Delivery (Panel 9)
 - Was the 2K process on track with the milestones?

Entitled Process requires:

- 50% at A-240
- 80% at A-120
- 100% at A-75

USS EVERSAIL:

- 40% at A-240 Boiler work and Alt package not sufficiently identified
- 60% at A-120 Ship experienced upload problems and was deployed, could not fix
- 100% at A-75 Recovered in time but meant that KTR expending premium to plan

AVAILABILITY FEEDBACK FORM INSTRUCTIONS

In order to support the SHIPMAIN processes and Continuous Maintenance philosophies, a "Hot Wash" Feedback Process has been developed. This process will ensure that, vital feedback information is continually being collected by the process participants and corrective action/process improvements developed and instituted by the process owners. It is requested that any process issue be documented on the attached Availability Feedback Form, and routed to the Executing Maintenance Team / Cross Functional Team for action. Below are simple guidelines for filling this form out, blocks that do not apply should be "N/A'd".

This form is available on the SHIPMAIN web site (www.spear.navy.mil/shipmain). It should also be provided by the Class Team Leader to all participants at the ship's arrival conference (as discussed in CNSF4703 paragraph 4.b.).

- Block 1. Ship Name / Hull Number: Input the alpha-numeric designator for the ship worked, i.e. CG-XX, DDG-XX.
- Block 2. Availability Type / FY: Input the type of maintenance availability and the fiscal year accomplished, i.e. SRA / 2004, FMAV 2005.
- Block 3. Subject Title: Input a brief description of the process, issue or feedback being generated, i.e. corrosion control, contract scheduling issues, Maintenance Team process issues.
- Block 4. Executing Authority: Input the name of the organization involved.
- Block 5. Shipyard/Repair Activity: Input the name of the repair activity.
- Block 6. Description of process success or problem: Input a brief description of the process issue in question, i.e. late funding receipt, contract change processing, availability scheduling.
- Block 7. Impact: Input a brief description of the resultant impact to the process in question.
- Block 8. Recommended Action: Input a brief description of the recommended corrective action that could correct the overall process problem.
- Block 9. Prepared by: Input your name.
- Block 10. Organization/Activity: Input the name of your parent organization, activity or command.

- Block 11. Date: Input the date of submittal.
- Block 12. Phone number: Input the phone number that would provide the most success in contacting you.
- Block 13. E-Mail Address: Input the "E" Mail address that would provide the most success in contacting you.

19 Aug 04

Availability Feedback Form		
1. Ship Name / Hull No: USS XX / CG-XX	2. Availability Type / FY: SRA. 2004	3. Subject Title: Requirements definition
4. Executing Authority: XX Regional Maintenance Center		5. Shipyard / Repair Activity: "We fix Ships Corporation"
6. Description of process success or problem: Definization of work package did not occur IAW planned milestones due to late work identification. In particular, HM&E Main Propulsion Diesels and boiler repairs.		
7. Impact: Late definition of the work package delayed award of contract CLIN by three weeks, which in turn delayed procurement of materials, award of subcontractor Purchase Orders and final package planning and integration. This had a ripple effect through the execution phase.		
8. Recommended Action: Evaluate the process of identifying repairs associated with diesels and boilers. Include reservations for historical typical repairs based on an engineering analysis of Notional repairs. Include diesel and boiler inspectors in the work package preparation process.		
9. Prepared By: Joe Feedback	10. Organization / Activity: XXRMC	11. Date: 29 January 2004
12. Phone Number: (757) 555-1234		13. E-Mail Address: jrfeedback@navy.mil

19 Aug 04

Availability Feedback Form		
1. Ship Name / Hull No:	2. Availability Type / FY:	3. Subject Title:
4. Executing Authority:		5. Shipyard / Repair Activity:
6. Description of process success or problem:		
7. Impact:		
8. Recommended Action:		
9. Prepared By:	10. Organization / Activity:	11. Date:
12. Phone Number:		13. E-Mail Address:

STANDARD BARRIER RANKING PROCESS

- The Standard Barrier Ranking Process is a subjective numerical methodology to evaluate and rank any identified barrier(s), which could possibly hinder the successful completion or implementation of a specific process.
- The Ranking Process may be utilized by any team (i.e. CFT, BRT or Maintenance Team) when evaluating identified barriers, and is implemented by first establishing a barrier ranking team chaired by the RMC Class Team Leader and comprised of key Maintenance Project Team members. The exact composition of the ranking team may be determined by the Class Team Leader and may vary depending on the type and complexity of the availability. The process involves the following steps:
 - Each team member subjectively evaluates the individual barriers in terms of both an "Impact " and "Removal Difficulty" ranking using a 1-10 numeric scale.
 - Individual team members may discuss and justify their scores (if necessary) with the entire team agreeing to an overall consensus rank for both scores.
 - The actual barrier rank is calculated by utilizing an equation of: $\text{Impact Score} \div \text{Removal Difficulty Score}$.
 - The resultant score is then recorded and evaluated, with those barriers having a higher score, theoretically having a higher probability of success for its' removal and implementation of a resulting process change.
- Visually, the scores may be plotted on a 1-10 horizontal and vertical scale graph. The individual barrier Impact and Removal Difficulty scores are then plotted on the grid, with those plotting in the upper left quadrant being the ones most likely to have a successful removal.

HOT WASH MEETING AGENDA TOPICS

- (1) Placement Oversight
 - o Maintenance Team Execution
 - Ship alteration execution
 - On-time, on-cost review
 - o Metrics (see attachment 3)
- (2) Package Preparation
 - o Planning Yard
 - LAR Response
 - Drawing accuracy
 - o Multi-Ship Multi-Option execution planning
 - Proper work scope accuracy
 - Estimate versus actual cost
 - Long lead time material
- (3) Requirements
 - o Proper documentation (including EOS, test memos, etc.)
 - o On-time ILS certification
 - o Funding
- (4) Project Team
 - o Quality of training
 - Maintenance Team Training
 - IT Training
 - o Team preparation for the availability
 - o Preparation of Project Team for SHIPMAIN process
- (5) Alts/Mods
 - o Planned alterations executed
 - o Milestones vs. actual completion dates
 - o On-time availability of material
 - o Changes planned for install vs. changes actually installed
- (6) Repeat Alterations
- (7) Work Integration
- (8) Barriers
- (9) Best Practices

BREAKOUT TEAM REPORT

USS XX HULL# FY-XX AVAIL TYPE Availability Hot Wash
(Title of Breakout Team Task Assignment)
Group Leader- (Name)

PURPOSE: Provide learning points from the completed project that will allow future projects to run more smoothly and achieve continued improvement in cost, quality, and schedule performance. It is important that all understand that there is no hidden agenda to pick on failures or weak points, or to pat one another on the back. Remember, "Think Process."

As we discuss items in this group, the desired outcome will be to answer each the following questions:

- What's the topic for improvement?
- What do we want to get from the discussion?
- What are we going to do?
- Why are we going to do it?
- Where/how do we get it done?

TOPICS FOR BREAKOUT SESSION DISCUSSION:

- I. Breakout Group 1A (List as necessary)
 - A. Subject
- II. Breakout Group 1B (List as necessary)
 - A. Subject
- III. What is the topic?:
 - Brief description of issue
- IV. What is the result we want?
 - Bullet list of the desired outcomes
- IV. What are we going to do?
 - Bullet list of the recommended corrective actions
- VI. Why are we going to do it?
 - Bullet list of why the change is desired
- VII. Where/How will this be done?
 - Bullet list of how the actions will be implemented

Breakout Team Leader: (Name, Command, Phone & Email)
CFT Process Owner: (Name, Command, Phone & Email)

HOT WASH MEETING MINUTES

From: XX Regional Maintenance Center, Code "XXX"
To: Distribution

Subject: REPORT OF HOT WASH MEETING (DATE AND YEAR OF MEETING)
FOR INFORMATION AND FOLLOW UP

Encl: (1) Attendance List
(2) Breakout Team Reports -(Separate enclosure for each topic):

I. Background:

- A. Provide information on type of availability, location and scheduled time frame.
- B. Identify Maintenance Team members and representatives of participating commands, which provided an availability overview. Provide a list attendees using the enclosed roster. Outline the objective of the meeting and make recommendations that would improve maintenance processes and practices for future availabilities.
- C. Describe the format and guidance of the Hot Wash meeting.
- D. Describe the Breakout Team agendas, discussion, and recommendations. Attach Breakout Team Report. The intent is that the process owners will review them and if required hold follow-on discussions.
- E. The minutes shall contain suggestions for continuous improvement of SHIPMAIN processes.

II. Discussion at Meeting:

- A. The Class Team Leader, shall open the meeting and remind all present that the purpose of the meeting is to evaluate the processes, practices and procedures for the availability with the objective of improving them for future availabilities. He should note the planned format for the meeting, how to involve working groups in framing issues, and how the Hot Wash process is used to find better ways for the Maintenance Teams to learn from completed availabilities. He must stress that the purpose is to evaluate the processes dispassionately and objectively, not to rate or evaluate individuals' or contractor's performances.
- B. The Ship's Commanding Officer is requested to provide his or her opening remarks and provide the ship's overview of the availability.

19 Aug 04

- C. The Class Team Leader is requested to provide a summary overview of the major work, key metrics, key personnel, key process issues, and Maintenance Team comments.

III. Provide information on Additional Items:

- A. The Class Team Leader shall provide a listing of those availability feedback issues that were submitted but not discussed during the Hot Wash meeting. This shall include a brief explanation of the standard ranking process used to identify those key process issues.
- B. Action items should be recorded on the W3 form and included with final minutes. Follow up of action items should be referenced in the minutes, as designated in business rules.
- C. The RMC Business Office will post the meeting minutes to the designated location on the SHIPMAIN web site.
- D. The Hot Wash report shall be forwarded for appropriate review and follow up to designated points of contact, including meeting attendees (maintenance team), SHIPMAIN CFT Process Owners and Action Officers, SHIPMAIN Process Team and Metrics Team, ship class points of contact, follow-on availability points of contact, and RMC Commanders, waterfront officers, and others as necessary. All attachments should be considered "working notes" and interested parties and process participants should contact the responsible group leader for further explanation or detail.

SHIP CLASS CATEGORY DISTRIBUTION LISTS

L-Ship Distribution

AFLOATRAGRUPAC PACNORWEST DET	COMPHIBGRU THREE
CG I MEF	COMPHIBGRU TWO
CG II MEF	COMSECONDFLT
CG III MEF	COMSEVENTHFLT
CHET NORFOLK VA	COMSPAWARSSYSCOM SAN DIEGO CA
CHET SAN DIEGO CA	COMTACGRU ONE
CHET YOKOSUKA JA	COMTHIRDFLT
CMC WASHINGTON DC	CTF 51
COMAFLOATRAGRU MAYPORT FL	ELEVENTH MEU
COMAFLOATRAGRU NORFOLK VA	EWTGLANT NORFOLK VA
COMAFLOATRAGRUMIDPAC PEARL HARBOR HI	EWTGPAC SAN DIEGO CA
COMAFLOATRAGRUPAC SAN DIEGO CA	FIFTEENTH MEU
COMAFLOATRAGRUWESTPAC YOKOSUKA JA	FTSCLANT NORFOLK VA
COMFLTFORCOM NORFOLK VA	NAVSHIPYD AND IMF PUGET SOUND
COMLANTFLT NORFOLK VA	DET BOSTON MA
COMMARFORLANT	NAVSHIPYD NORFOLK VA
COMMARFORPAC	NAVSURFWARCEN COASTSYSTA
COMNAVAILRANT NORFOLK VA	PANAMA CITY FL
COMNAVPAIRPAC SAN DIEGO CA	PEO C4I AND SPACE SAN DIEGO CA
COMNAVPAIRSYSCOM PATUXENT RIVER MD	PEO IWS WASHINGTON DC
COMNAVBEACHGRU ONE	PEO SHIPS WASHINGTON DC
COMNAVBEACHGRU TWO	PHIBGRU ONE
COMNAVNETWARCOM NORFOLK VA	PHIBGRU THREE
COMNAVSAFECEN NORFOLK VA	PHIBGRU TWO
COMNAVSEASYSYSCOM WASHINGTON DC	PRESINSURV NORFOLK VA
COMNAVSURFLANT NORFOLK VA	SOUTHWEST RMC SAN DIEGO CA
COMNAVSURFOR SAN DIEGO CA	THIRTEENTH MEU SOC
COMNAVSURFPAC SAN DIEGO CA	THREE ONE MEU
COMPACFLT PEARL HARBOR HI	TWO FOUR MEU
COMPHIBGRU ONE	TWO SIX MEU
	TWO TWO MEU

SHIP CLASS CATEGORY DISTRIBUTION LISTS (continued)

M-Ship Distribution

CENNAENGINEERING NORFOLK VA
CNO WASHINGTON DC
COMCMDIV ELEVEN
COMCMDIV THREE ONE
COMCMRON ONE
COMCMRON THREE
COMCMRON TWO
COMINWARCOM CORPUS CHRISTI TX
COMLANTFLT NORFOLK VA
COMLOG WESTPAC
COMNAVNETWARCOM NORFOLK VA
COMNAVSEASYS COM WASHINGTON DC
COMNAVSURFGRU MED
COMNAVSURFLANT NORFOLK VA
COMNAVSURFOR SAN DIEGO CA
COMNAVSURFPAC SAN DIEGO CA
COMREGSUPPGRU INGLESIDE TX
COMSERVFORSIXTHFLT SRU BAHRAIN
COMSPAWARSSYS COM SAN DIEGO CA
FTSCLANT DET INGLESIDE TX
FTSCLANT NORFOLK VA
FTSCPAC DET YOKOSUKA JA
MINEWARTRACEN INGLESIDE TX
NAVICP MECHANICSBURG PA
NAVSEALOGCEN MECHANICSBURG PA
NAVSHIPREPFAC DET SASEBO JA
NAVSHIPYD AND IMF PUGET SOUND WA
NAVSHIPYD PUGET SOUND WA
NAVSURFWARCEN PANAMA CITY FL
NAVSURFWARCEN SHIPSYSENGSTA PHILADELPHIA
PA
PEO C4I AND SPACE SAN DIEGO CA
PEO LMW WASHINGTON DC
PEO SHIPS WASHINGTON DC
PRESINSURV NORFOLK VA
SERVSCOLCOM GREAT LAKES IL
SIMA NRMF INGLESIDE TX
SOUTH CENTRAL RMC INGLESIDE TX
SOUTHWEST RMC SAN DIEGO CA
SUPSHIP JACKSONVILLE DET INGLESIDE TX
SWOSCOLCOM NEWPORT RI

SHIP CLASS CATEGORY DISTRIBUTION LISTS (continued)

Combatant Ship Distribution

AEGIS BMD WASHINGTON DC	FTSCLANT DET MAYPORT FL
AFLSC NORFOLK VA	FTSCLANT DET NAPLES IT
CBTDIRSYSACT DAM NECK VA	FTSCLANT NORFOLK VA
CHET EVERETT WA	FTSCPAC DET EVERETT WA
CHET MAYPORT FL	FTSCPAC DET PEARL HARBOR HI
CHET NORFOLK VA	FTSCPAC SAN DIEGO CA
CHET PASCAGOULA MS	HAWAII RMC PEARL HARBOR HI
CHET PEARL HARBOR HI	MIDLANT RMC NORFOLK VA
CHET SAN DIEGO CA	NAVICP MECHANICSBURG PA
CHET YOKOSUKA JA	NAVMEDIACEN FSD NORFOLK VA
CNO WASHINGTON DC	NAVSHIPYD AND IMF PEARL HARBOR HI
COMAFLOATRAGRU NORFOLK VA	NAVSHIPYD AND IMF PUGET SOUND WA
COMCARGRU EIGHT	NAVSHIPYD NORFOLK VA
COMCARGRU FIVE	NAVSHIPYD PORTSMOUTH NH
COMCARGRU SEVEN	NAVSURFWARCEN PHDIV VIRGINIA BEACH VA
COMCARGRU SIX	NAVSURFWARCEN PORT HUENEME DET SAN DIEGO CA
COMCARGRU THREE	NAVSURFWARCEN PORT HUENEME DIV DET LOUISVILLE KY
COMCARGRU TWO	NAVSURFWARCEN SHIPSYSENGSTA PHILADELPHIA PA
COMCRUDESGRU EIGHT	NAVSURFWARCENDIV CRANE IN NAVSURFWARCENDIV DAHLGREN VA
COMCRUDESGRU THREE	NAVSURFWARCENDIV PORT HUENEME CA
COMCRUDESGRU TWELVE	NRL WASHINGTON DC
COMCRUDESGRU TWO	PEO C4I AND SPACE SAN DIEGO CA
COMDESRON FOURTEEN	PEO IWS WASHINGTON DC
COMDESRON NINE	PEO SHIPS WASHINGTON DC
COMDESRON SEVEN	SERVSCOLCOM GREAT LAKES IL
COMDESRON THREE ONE	SOUTHEAST RMC MAYPORT FL
COMFLTFORCOM NORFOLK VA	SOUTHWEST RMC SAN DIEGO CA
COMLANTFLT NORFOLK VA	SPAWARSYSCEN CHARLESTON SC
COMNAVNETWARCOM NORFOLK VA	SPAWARSYSCEN SAN DIEGO CA
COMNAVSAFECEN NORFOLK VA	SUPSHIP BATH ME
COMNAVSEASYSYSCOM WASHINGTON DC	SUPSHIP GROTON CT
COMNAVSURFGRU MIDPAC	SUPSHIP GULF COAST MS
COMNAVSURFGRU PACNORWEST	SUPSHIP JACKSONVILLE FL
COMNAVSURFLANT NORFOLK VA	SUPSHIP NEWPORT NEWS VA
COMNAVSURFPAC SAN DIEGO CA	SUPSHIP PORTSMOUTH VA
COMNAVSURFPAC SAN DIEGO CA	SUPSHIP PUGET SOUND WA
COMPACFLT PEARL HARBOR HI	SUPSHIP SAN DIEGO CA
COMPHIBRON SEVEN	
COMSECONDFLT	
COMSEVENTHFLT	
COMSPAWARSSYSCOM SAN DIEGO CA	
COMTHIRDFLT	
COMUSFLTFORCOM NORFOLK VA	
DSCC COLUMBUS OH	
FLETRACEN NORFOLK VA	
FTSCLANT DET INGLESIDE TX	

COMNAVSURFORNOTE 4703
19 Aug 04

SHIP CLASS CATEGORY DISTRIBUTION LISTS (continued)

Auxiliary Ship Distribution

CNO WASHINGTON DC
COMAFLOATRAGRU NORFOLK VA
COMENTSTRKGRU
COMFLTFORCOM NORFOLK VA
COMLANTFLT NORFOLK VA
COMLOGRON TWO
COMNAVSEASYS COM WASHINGTON DC
COMNAVSURFGRU PACNORWEST
COMNAVSURFLANT NORFOLK VA
COMNAVSURFOR SAN DIEGO CA
COMPACFLT PEARL HARBOR HI
COMPHIBGRU TWO
COMSPAWARSSYS COM SAN DIEGO CA
COMUSFLTFORCOM NORFOLK VA
FLETRACEN NORFOLK VA
FTSCLANT DET MAYPORT FL
FTSCLANT DET NAPLES IT
FTSCLANT DET NEW LONDON CT
FTSCLANT NORFOLK VA
FTSCPAC SAN DIEGO CA
MIDLANT RMC NORFOLK VA
NAVICP MECHANICSBURG PA
NAVPERSEVCOM NORFOLK VA
NAVSHIPYD AND IMF PUGET SOUND WA
NAVSHIPYD NORFOLK VA
NAVSURFWARCEN PORT HUENEME DIV DET
LOUISVILLE KY
NAVSURFWARCEN SHIPSYSENGSTA
PHILADELPHIA PA
NAVSURFWARCENDIV CRANE IN
NAVSURFWARCENDIV DAHLGREN VA
NAVSURFWARCENDIV PORT HUENEME CA
NORWESTREGMAINTCOORD BREMERTON WA
PEO IWS WASHINGTON DC
PEO SHIPS WASHINGTON DC
PRESINSURV NORFOLK VA
SERVSCOLCOM GREAT LAKES IL
SIMA NORFOLK VA
SOUTHWEST RMC SAN DIEGO CA
SPAWARSSYSCEN CHARLESTON SC
SPAWARSSYSCEN SAN DIEGO CA
SUPSHIP NEWPORT NEWS VA
SUPSHIP PORTSMOUTH VA
SUPSHIP PUGET SOUND WA
SUPSHIP SAN DIEGO CA

Port Loading Business Rules

1. Purpose. To promulgate process guidelines for minimizing premium costs incurred due to non-optimized port loading for ship maintenance. The process is guided by operational and maintenance schedule documentation and port loading metrics that reflect the expected premium costs for implementing a particular plan or port loading scenario. A significant development implemented via this set of business rules is the use of a workflow modeling tool, which is used for quantitative analyses of potential workload scenarios. These business rules affect Type Commanders (TYCOMs), Fleets, Regional Maintenance Centers, and Naval Sea Systems Command (NAVSEA 04).

2. Background. Until recently, the processes for scheduling ship maintenance has depended upon nothing more than an intuitive understanding of the premium costs incurred or savings gained when assessing and modifying port loading. Under this former process, CNO availabilities were scheduled to comply with OPNAV N43 requirements and then modified to satisfy operational requirements within the constraints of available funding. Port resources (workforce and facilities) were considered, but in a very subjective manner. These decisions were made by the TYCOMs with assistance from the Fleet Commander's staff (FLTCOM's) and NAVSEA 04. The schedule was entered into FMPMIS and, upon approval by OPNAV N43, became the program of record. The primary tools applied in the assessment of these schedules were workload charts, produced by NAVSEA 04. These charts, similar to the Workload And Resource Report (WARR) used by the Naval Shipyards, provide a notional "men per day" of effort required to execute the given schedule. Schedulers at the TYCOMs and Fleets would attempt to smooth the port loading based on the hypothesis that a flat workload would be less expensive to execute. Because there was no way to quantify the effects of non-optimal port loading, proposed deviations from the "baseline" port loading scenario could not be effectively judged as being more or less expensive. Commander, Naval Surface Force (CNSF) initiated an analysis of the influence of workflow delivery patterns on productivity and the man-day rate for depot level maintenance in the San Diego area and subsequently for the Norfolk area. The analysis was conducted during May and June 2002 to develop a quantitative computer model that reacts in a manner similar to the San Diego or Norfolk private shipyards when a given workload is assigned. The models resulting from these efforts provide significant insight into the effects of port loading fluctuations. Studies associated with SHIPMAIN have estimated that premiums resulting from "non-ideal" port loading comprise up to 40% of the total premiums paid. Because of this, proper consideration of the impact of port loading is critical to the proper fiscal management of the ship maintenance enterprise.

3. Definitions. Definitions to support workload optimization are provided below.

a. Premium: Any additional cost for maintenance planning and/or execution over and above what it would have cost if it was planned and

19 Aug 04

executed under ideal conditions. In the case of Port Loading, ideal conditions would be a constant workload with constant work for all activities and all work fully planned at time of execution.

b. Work Load: A static projection of the average "men per day" required to accomplish the amount of expected work. This is the primary input variable to the Port Loading model.

c. Port Loading: A dynamic output of the Port Loading Model demonstrating the average "men per day" required to accomplish the amount of Work Load proposed for the port.

d. FMPMIS: The Fleet Modernization Program Management Information System is the Navy's official database of scheduled CNO availabilities and programmed modernization.

4. Business Rules.

a. Type Commander (TYCOM) Responsibilities: The TYCOM proposes a long-term (i.e., that required to cover the maintenance requirements for each of the years in the current POM) schedule for CNO availabilities based on OPNAV N43 requirements and deployment schedules. In developing the schedule, the TYCOM must consider infrastructure limitations including dry-dock schedules and available workforce. In addition, the TYCOMs proposed schedule will reflect funding considerations such as Fiscal Year boundaries, current and future year predicted controls, and funding limitations. The goal of this effort is to produce a long-term schedule that satisfies all the technical requirements while providing the best opportunity to minimize premiums associated with port loading. It must be noted that even if the TYCOM scheduler produces a schedule that level loads the port, individual contractors or maintenance providers might not be ideally loaded. The TYCOM scheduler must work within the constraints of operational schedule requirements, as well as notional OPNAV N43 availability intervals and durations. The scheduler may use a version of the workflow model tailored to each port in order to evaluate various availability schedules or scenarios to minimize predicted premiums while staying within the boundary conditions previously noted. The TYCOM is responsible for entering the proposed schedule into FMPMIS so that RMAIS and NMD can be updated to accurately reflect the current schedule.

b. NAVSEA 04 Responsibilities. NAVSEA 04 is responsible for assessment of expected availability performance and industrial base variables. In this case, expected availability performance means producing the notional workload curve, (or phasing of man-days) for a specific type of availability. These curves are based upon historical performance reported to NAVSEA 04 by the SUPSHIPS or RMCs. Industrial base variables include assessments of baseline workforce in a particular port, man-day rates charged in the port, observed overtime usage, and other factors. This data is provided to the Fleet Commander's staff and TYCOM's staff as requested for application in

the workflow model. NAVSEA 04 reviews proposed schedule changes in FMPMIS. The approved schedules are combined with the notional phasing to produce a notional workload chart for a given port. This workload chart and data is provided to FLTCOM's and RMC's as in input to the port loading model. It should also be noted that while many organizations may be engaged in the consideration of different workload scenarios, SEA 04 has a unique responsibility to maintain the official Navy plan of record for ship depot maintenance, and is frequently called upon to brief OPNAV and Congressional staffs on industrial base and workload issues. As such, it is important for all organizations to maintain clear and open dialogue with SEA 04 on any proposed workload changes or alternative scenarios being considered.

c. Fleet Commander Responsibilities. The Fleet Commander's staff is responsible for assessing and approving/disapproving proposed changes to the maintenance schedule as proposed by the TYCOMs. In assessing the scheduled availability dates, the Fleets are verifying that the TYCOM has adhered to most current guidance. If there is a deviation, the Fleets insure that a valid reason (i.e. emergent repairs, operational changes, etc.) have been documented in FMPMIS with the proposed change. If the deviation is not supportable, Fleet will not authorize the schedule change. In assessing the schedule relative to funding, the Fleets are verifying that the proposed change can be executed financially. If there are insufficient funds, but the change is desired, the Fleet Commander's staff will coordinate with OPNAV N43 and the TYCOM to obtain necessary resources or develop an alternative solution. As proposed schedule changes are accumulated, the Fleets will request a workload chart from NAVSEA 04 for the port of interest. The Fleet N43 will task the respective RMC to perform a Port Loading assessment and report the results to Fleet and the respective TYCOM.

d. Regional Maintenance Center Responsibilities. The RMC will focus on the short-term schedule (i.e., the year of execution and the following year) rather than the long-term schedule. The focus of the RMC differs from that of the TYCOM scheduler because the RMC will generally have more detailed knowledge of the near-term workload and other conditions in the port. The RMC will maintain an up-to-date workload forecast that covers the current year of execution plus the following fiscal year, at a minimum. The RMC Commander should direct evaluations of this workload on a periodic basis. The focus of these evaluations must include analysis of the impacts of within scope growth, new work, contractor performance, unplanned schedule extensions, adverse weather or other Acts of God and their impact on schedules, etc. This analysis is critical, as it presents the only opportunity to take proactive measures to compensate for deviations between plan and actual execution. When schedule changes are proposed, the RMC will input the workload chart that reflects the current schedule, run the model and evaluate the results. Compare the current vs. proposed schedule to determine if the changes produce an acceptable premium based on the current entitlement. If it is acceptable and the proposed schedule is within the constraints of paragraphs b. and c. above, then the Fleet will approve

19 Aug 04

the changes in FMPMIS. If the premium is not acceptable, coordination with TYCOMs and NAVSEA 04 is required to modify the proposed changes and repeat the assessment process. The ability to regulate scheduling of the Continuous Maintenance workload is one of the primary mitigation tools at the disposal of the RMC Commander. Tailoring the CM workload in response to actual port conditions (rather than executing as a constant man-day workload load) represents an opportunity to further minimize premium payments. Evaluation of the RMC workload should include an analysis of options relative to CM scheduling. The current Port Loading premium model views only the overall port workload. In an ideal situation, each contractor and each trade skill will be level loaded. The RMC shall attempt to level load critical trades throughout the port. The organic capabilities of the RMC Production Department represent another tool at the disposal of the RMC Commander. Consideration should be given to maximizing the employment of the RMC Production Department during port workload peaks (including judicious use of overtime). During periods of scarce workload, RMC organic capabilities (particularly military workforce) could be pulled from the waterfront and scheduled for accomplishment of military training or other activities that are requirements, but do not accomplish ship maintenance. This would have the effect of transferring more work to the private sector, and preventing costs associated with laying off and then rehiring skilled workers.

5. Metric reporting. Each RMC will be responsible for reporting port loading premiums, in accordance with the Port Loading Metric. The metric currently consists of only a "planned premium", which is the premium projected by the model when the planned workload is compared to a level, average workload. Since the "planned premium" data will only change when the planned workload changes, it need only be reported each calendar quarter, or in any month in which the planned workload in a future month changes by 10% or more.

PORT LOADING

19 Aug 04

