



DEPARTMENT OF THE NAVY
COMMANDER
NAVY REGIONAL MAINTENANCE CENTER
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NORFOLK, VA 23511-2325

CNRMCIINST 4790.4B
Code 300
24 Sep 15

CNRMCI INSTRUCTION 4790.4B

From: Commander, Navy Regional Maintenance Center

Subj: INTEGRATED PROJECT TEAM DEVELOPMENT (IPTD) PROGRAM

Ref: (a) COMUSFLTFORCOMINST 4790.3, Joint Fleet Maintenance Manual (JFMM)
(b) Navy Modernization Process, Management and Operations Manual
(NMP-MOM) SL720-AA-MAN-030, Alterations to Ships Accomplished by
Alteration Installation Teams
(c) SECNAV M-5210.1, Records Management Manual
(d) Joint Memo btw CNRMC 7570 Ser C400/121 of 3 Aug 15/NAVSEA 02 4205
Ser 02/205 of 6 Aug 15

Encl: (1) A-360 Planning Event Requirements
(2) 50% Planned and Estimated (P&E) Multi-Ship Multi-Option (MSMO)/50%
2-Kilo Lock for Firm Fixed Price (FFP) Event Requirements
(3) 80% P&E/Work Package Integration Conference (WPIC) MSMO/WPIC (FFP)
Event Requirements
(4) A-30 Readiness to Start (RTS) Event/Work Package Execution Review
(WPER) Requirements
(5) Availability Completion Conference (C+21)
(6) End of Event Report Templates
(7) Tailored Milestone Message Template
(8) Project Team Strategies/Risk Card
(9) Event Readiness List (ERL)

1. Purpose. Provide policy and guidance for the execution of the Integrated Project Team Development (IPTD) Program.

2. Cancellation. CNRMCIINST 4790.4A.

3. Discussion

a. IPTD provides surface ship Chief of Naval Operations (CNO) Availability Project Teams (PT) with a foundation for the successful execution of a CNO Availability. IPTD Events improve the functional performance of the CNO Availability PT by ensuring roles and responsibilities of each PT member are known and understood, enhancing communication skills, promoting relationships between involved organizations, and developing executable project plans.

b. IPTD Events develop Availability expectations and success criteria, build and validate strategies, and align members of the integrated PT.

c. The events raise awareness of the Maintenance and Modernization End-to-End Policies and Processes directed in references (a) through (d).

d. Each IPTD Event is tailored to meet the specific needs of the PT and is instrumental in transitioning the independent management methods of the maintenance team into integrated focus of the PT. IPTD personnel facilitate discussions on milestones to increase the probability of successful Availabilities while clearly identifying those persons/entities responsible for deliverables throughout each phase of the Availability.

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e. IPTD is a forum for developing the relationships among the Surface Team One (ST1) community, including but not limited to, Ship's Force (SF), Commander, Navy Regional Maintenance Center (CNRMC), Regional Maintenance Centers (RMCs), Naval Sea Systems Command Surface Warfare Directorate (SEA 21), Space and Naval Warfare System Command (SPAWAR) and Type Commanders (TYCOMs). Each IPTD Event builds a positive team dynamic by creating an environment for approaching and resolving challenges as a team and ultimately improving the Availability execution process. Additionally, the IPTD Event provides a venue for identifying and mitigating Availability risks, as well as establishing and tracking progress to Availability Planning Milestones.

4. Policy. A minimum of five IPTD Events will be held for all CNO Availabilities and their associated PT: A-360 Planning Event, 50% P&E MSMO / 50% 2-Kilo Lock for FFP Event, 80% P&E / WPIC MSMO / WPIC (FFP) Event Requirements, A-30 Readiness To Start (RTS) Event / WPER and Availability Completion Conference (C+21). Additional events may be held if the need presents itself. IPTD Event timeline may be shifted left or right as required to meet the needs of the PT and the individual Availability. Enclosures (1) through (9) delineate the minimum requirements for each of the five IPTD Events. The PT may add additional agenda items and/or PT Strategies tailored to an individual Availability. Examples of additional PT Strategies can be found on the CNRMC SharePoint website link <https://navsea.portal.navy.mil/home/CNRMC/SitePages/NRMCHome.aspx>.

5. Event Overview

a. A-360 Planning Event. Transition ownership and responsibility for the final development of the Availability Work Package (AWP) from the Advanced Planning Phase (SEA 21 - Surface Maintenance Engineering Planning Program (SURFMEPP) responsibility), to the Planning Phase (CNRMC - NSA/RMC responsibility). Review, update, and identify risks.

b. 50% P&E MSMO/50% 2-Kilo Lock for FFP Event. This event will be scheduled based on the JFMM tailored milestone determined at the A-360 event. The event focuses on work package development, project strategies and reviewing, updating and identifying risks.

c. 80% P&E/WPIC MSMO/WPIC FFP Event. This event will be scheduled based on the JFMM tailored milestone determined at the A-360 Event. The primary purpose of this event is to conduct the WPIC.

d. A-30 RTS Event/WPER. The primary purpose of this event is to conduct the WPER meeting.

e. Availability Completion Conference (C+21). The primary purpose of this conference is to conduct a detailed review of the work package executed during the CNO Availability, and identify Lessons Learned that can be utilized for revising work items and class standard work templates for future maintenance availabilities. Additionally, this conference will serve as the transition (CNRMC - NSA/RMC) back to Advanced Planning (SEA 21 - SURFMEPP) to commence the next cycle in the Fleet Response Plan (FRP).

6. Roles and Responsibilities

a. IPTD Facilitators. IPTD Facilitators at each RMC/region support the international IPTD Program. Specifically they will:

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(1) Work with the RMC Project Manager (PM) to establish event dates as early as possible, but No Later Than (NLT) 45 days prior to the event.

(2) Coordinate all IPTD Events with CNRMC Code 300.

(3) Record Action Items.

(4) Prepare the draft End of Event Report using Enclosure (6) and provide to the RMC PM within five working days.

(5) Provide support to the RMC PM in the development of the required strategies.

b. RMC Class Team Leader (CTL). Assists the RMC PM in preparation for IPTD Events and ensures PT members are assigned and attend all IPTD Events.

c. Project Managers (PM). As the leader of the PT, RMC PMs are also the designated lead at IPTD Events. Specifically, they will:

(1) Provide an initial Point Of Contact (POC) list to the IPTD Facilitator for the A-360 Planning Event and then update that list at least 45 days prior to every subsequent event.

(2) Work with the IPTD Facilitator to establish event dates as early as possible but NLT 45 days prior to the event.

(3) Work with IPTD Facilitator to develop event agendas, tailoring modules to include relevant briefs and updates specific to the availability.

(4) Review, assign ownership and estimated completion date to action items identified during IPTD Events. Ensure action items are tracked and completed in between IPTD Events and briefed as the first agenda item at the next IPTD Event.

(5) Ensure strategies are assigned, developed, reviewed and ready for signature as early as possible but NLT the WPER Event using Enclosure (8).

(6) Approve the IPTD End of Event Report and provide feedback to the IPTD Facilitator NLT three working days after receipt from the facilitator for dissemination to the PT.

(7) In coordination with the Port Engineer (PE), communicate IPTD discussions with SF while ship is deployed.

(8) Develop and provide Risk Letter draft and Risk Cards for 50% P&E MSMO / 50% 2-Kilo Lock for FFP Event / 80% P&E / WPIC MSMO / WPIC FFP Event and A-30 RTS Event/WPER events.

d. Port Engineer (PE). As the representative of TYCOM and SF at IPTD Events, he/she must communicate SF concern and comments. Specifically, they will:

(1) Coordinate with the PM to establish event dates as early as possible but NLT 45 days prior to the event.

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(2) Coordinate with PM to develop event agendas, tailoring modules to include relevant briefs and updates specific to the Availability.

(3) Coordinate with the PM to ensure strategies are assigned, developed, reviewed and ready for signature as early as possible but NLT the WPER event using Enclosure (8).

(4) Review the IPTD End of Event Report and provide feedback to the PM NLT three working days after receipt from the facilitator for dissemination to the PT.

(5) In coordination with the PM communicate IPTD discussions with SF while ship is deployed.

e. Planning Activity. Shall assist the PM in preparations for IPTD Events. Specifically they will:

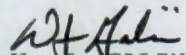
(1) Have planning products available for review.

(2) Have proposed availability schedule ready for review.

(3) Have Long Lead Time Material (LLTM) and critical material identified for review along with estimated delivery dates.

(4) Current status of Lifecycle Maintenance, TYCOM Repair, Modernization (e.g. Habitability, Alterations, and Assessments).

7. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed per reference (c). Requests for copies shall be forwarded to CNRMC for coordination and clearance.


W. J. GALINIS

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A-360 Planning Event Requirements

Objectives

1. Validate CNO Availability duration and JFMM (entitled or tailored) Planning Milestones from A-360 through definitization or contract award.
2. Validate CNO Availability controls.
3. Review the approved Modernization Plan (TYCOM/SEA 21) and identify items that could impact Availability schedule, budget and/or resourcing.
4. Review the Mandatory Technical Requirements (MTR) (SURFMEPP) and identify items that could impact Availability schedule, budget and/or resourcing.
5. Review the Availability Work Package (AWP) and identify items that could impact Availability schedule, budget and/or resourcing.
6. Review Risk Management (identify, categorize, update and assign risk lead.
7. Apply historical cost returns and develop list of Work Notification / Work Specifications which meet Management of Growth Reserve criteria in accordance with CNRMC 7570 Ser C400/121/NAVSEA 02 4205 Ser 02/205 Joint Memo of August 2015.
8. Develop draft Execution Key Event/Milestone Schedule.
9. Introduce Event Readiness List (ERL) - Enclosure (9)

Recommended Participants

Type Commander (TYCOM)

- Type Desk Officer (TDO)
- Type Desk Assistant (TDA)
- Availability Work Package (AWP) Manager
- Port Engineer (PE)
- Combat Systems Port Engineer (CSPE)
- ATG Engineering Assessment (N82)

Commander, Navy Regional Maintenance Centers (CNRMC)

- Senior Representative

Regional Maintenance Center (RMC)

- Class Team Leader (CTL)
- Project Manager (PM)
- Ship Superintendent
- Assessment Director (AD)
- Administrative Contracting Officer (ACO)
- Alterations Installation Teams (AIT) Planner
- Project Support Engineer
- Ship Building Specialist (SBS)
- Quality Assurance Specialist (QAS)
- Integrated Test Engineer (ITE)
- Project Officer

Planning Yard

- Representative

Space and Naval Warfare Systems Command (SPAWAR)

- Fleet Readiness Directorate (FRD), Installation Lead

Naval Sea Systems Command (NAVSEA), Surface Warfare Directorate (SEA 21), Naval Surface Warfare Center (NSWC)

- Ship Platform Manager (SPM)
- Program Management Office Representative (PMR) Lead
- Combat Systems Project Engineer

Surface Maintenance Engineering Planning Program (SURFMEPP)

- Baseline AWP (BAWP) Manager
- Detachment Representative
- Platform Engineer

Ship

- Ship's Force Leadership
- CNO AVAIL Coordinator

Planning Activity (as applicable)

- Representative for Planning (Planning Division) and Execution (Operations Division)

Agenda Items

- A-410 (Mid-Cycle Review) Action Item review and update (Facilitator/SURFMEPP DET ENG)
- JFMM Planning Milestones - Review and tailor (CNRMC/Facilitator)
- Availability Budget (CNO Controls (Maintenance and Modernization)) to available controls (e.g., Controls w/o growth/fees/FIFO) (TYCOM/SEA 21)
 - Execution Planning Funds Status
- MTR Status (SURFMEPP DET ENG)
 - Baseline Availability Work Package (BAWP) content and status
 - Duration Scorecard Review
 - Cost
 - Percent of Work Package
 - Assessment Plan (Tanks (NLT 20% I/O), systems, etc.) (AD/SURFMEPP DET ENG)
 - Who, where, when, funding
- Modernization (SEA 21/TYCOM)
 - Alteration Installation Teams (AITs)
 - Habitability
 - Long Lead Time Material (LLTM)
 - Ship Installation Drawings (SID) status
 - Execution Planning Funds Status
 - Planning Yard Status
- Availability Work Package (AWP) and 2-Kilo Review (AWPM)
 - Screened
 - Anticipated (specifically address DFSSs, TSOs, and CASREPs)
- Planning activity Status (3PP, RMC, MSMO)
 - Funded/Authorized
 - Work Notifications (WN)
 - Work Package Development (Work Item development, review, and approval)
 - LLTM identification, funding and ordering (EDD) status
 - Critical material to support critical path controlling work.
- Develop list of Work Notifications / Work Specifications which meet Management of Growth Reserve criteria in accordance with CNRMC 7570 Ser C400/121/NAVSEA 02 4205 Ser 02/205 Joint Memo of August 2015.
- Risk Management (CNRMC/Facilitator)
 - Identify, categorize, update additional risk
 - Develop risk mitigations and assign a risk lead
- Lessons Learned (LLC Lead/Facilitator)
- Introduce ERL- Enclosure (9) (Facilitator)
- Ship Check Plan (who, where, when, funding) (Facilitator/TYCOM)
- Develop Draft Execution Key Event/Milestone Schedule (Facilitator)
 - Identify Critical Path/Controlling Jobs (Production/testing)
 - Identify "wrench-turning" days to Combat Systems Production Completion Date (CSPCD) and Engineering Plant Production Completion Date (PCD)
 - Identify holidays
 - Identify system restoration (Stage 3 testing) and testing timeline to complete all System Operational Verification Tests (SOVT) prior to end of Availability
 - Identify dry dock Availability (as applicable)
- Plan date, time, and venue for 50% P&E MSMO / 50% 2-Kilo Lock for FFP Event (Facilitator)

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Deliverables

1. End of Event Report - Enclosure (6)
2. Updated Action Items
3. JFMM Tailored Milestones for Planning (agreed to by TYCOM and SEA 21 for release via Naval Message by NSA within five working days of Event)
4. Development of Risk Cards - Enclosure (8)
5. Draft Execution Key Event/Milestone Chart
6. Updated POC list

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50% P&E (MSMO)/ 50% 2-Kilo Lock for FFP Event Requirements**Objectives**

1. Review/develop/assign Project Team Strategies (PCD, Work Integration and Tank) - Enclosure (8).
2. Review of Planning and draft Execution Key Event/Milestone schedule.
3. Review the approved Modernization Plan (TYCOM/SEA 21) and identify items that could impact Availability schedule, budget and/or resourcing.
4. Review the Mandatory Technical Requirements (MTR)(SURFMEPP) and identify items that could impact Availability schedule, budget and/or resourcing.
5. Review the TYCOM Availability Work Package (AWPM) and identify items that could impact Availability schedule, budget and/or resourcing.
6. Review Risk Management (identify, categorize, update and assign risk lead).
7. Apply historical cost returns and develop list of Work Notifications / Work Specifications which meet Management of Growth Reserve criteria in accordance with CNRMC 7570 Ser C400/121/NAVSEA 02 4205 Ser 02/205 Joint Memo of August 2015.
8. Review Planning Status.
9. Develop DRAFT Event Readiness List(ERL) - Enclosure (9)

Recommended Participants**Type Commander (TYCOM)**

- Type Desk Officer (TDO)
- Availability Work Package (AWP) Planner
- Port Engineer (PE)
- Combat Systems Port Engineer (CSPE)

Commander, Navy Regional Maintenance Centers (CNRMC)

- Representative

Regional Maintenance Center (RMC)

- Class Team Leader (CTL)
- Project Manager (PM)
- Ship Superintendent
- Assessment Director (AD)
- Alterations Installation Teams (AIT) Planner
- Administrative Contracting Officer (ACO)
- Project Support Engineer (PSE)
- Integrated Test Engineer (ITE)
- Ship Building Specialist (SBS)
- Quality Assurance Specialist (QAS)
- Project Officer (PO)

Planning Yard

- Representative

Space and Naval Warfare Systems Command (SPAWAR)

- Fleet Readiness Directorate (FRD), Installation Lead Representative
- On Site Installation Coordinator (OSIC)

NAVSEA, Surface Warfare Directorate (SEA 21), Naval Surface Warfare Center (NSWC)

- Ship Platform Manager (SPM)
- Program Management Office Representative (PMR) Lead
- Combat Systems Project Engineer (CSPE)

Surface Maintenance Engineering Planning Program (SURFMEPP)

- Baseline AWP (BAWP) Manager
- Detachment Representative
- Platform Engineer

Ship

- CNO AVAIL Coordinator
- Ship Material Maintenance Officer (SMMO)

Planning Activity (as applicable)

- Representative for Planning (Planning Division) and Execution (Operations Division)

Agenda Items

- Introductions and Expectations (Facilitator)
- CO's Expectations (CO/PE)
- Review A-360 Action Items (Facilitator)
- Planning Status Brief (PM)
 - o Where are we now - Understand status of Work Notifications (WN) screened, work items written, specs reviewed, specs approved, LLTM (GFM/CFM) status, PCPs (developed, reviewed and approved), status of AITs, I Level and TA4 Work Items, ship check/SID status, PM concerns, current status of JFMM tailored Planning milestones and funding status.
- Review of Class Maintenance, Modernization and "I" Level Work (PE/PMR/C900)
- BAWP/AWP planned assessments Brief (AWPM/SURFMEPP/AD)
- Risk Management Exercise (Facilitator)
- Develop ERL (Facilitator)
- Review and update draft Execution Milestone Chart (Facilitator)
- ALO/BMDRA/CSLO Brief (as applicable)
- Develop list of Work Notifications / Work Specifications which meet Management of Growth Reserve criteria in accordance with CNRMC 7570 Ser C400/121/NAVSEA 02 4205 Ser 02/205 Joint Memo of August 2015.
- Primer on writing Strategies (Facilitator)
 - o Learn why a Project Team needs their own strategies; what differentiates a strategy from standard procedures; understand the elements of a strategy and when a team would use it during the avail
 - o Review, develop and assign Project Team Strategies
 - Develop PCD, Work Integration and Tank Strategies
- Plan date, time and venue for 80% P&E / WPIC MSMO / WPIC FFP Event. (Facilitator)
- Plan date, time, Show and discuss Responsibility, Accountability, Consulted, and Informed (RACI) from JFMM. (Facilitator)

Deliverables

1. Draft Project Team Strategies - Enclosure (8)
2. End of Event Report - Enclosure (6)
3. Updated Action Items
4. Reviewed, updated and revised Risk letter/ Cards - Enclosure (8)
5. Updated Planning / draft Execution Key Event/Milestone Chart
6. Draft ERL- Enclosure (9)

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80% P&E / WPIC MSMO / WPIC FFP Event Requirements**Objectives**

1. Conduct the WPIC in accordance with Fleet Desk Guide (FDG).
2. Review the approved Modernization Plan (TYCOM/SEA 21) and identify items that could impact availability schedule, budget and/or resourcing.
3. Review the Mandatory Technical Requirements (MTR) (SURFMEPP) and identify items that could impact availability schedule, budget and/or resourcing.
4. Review the TYCOM Availability Work Package (AWPM) and identify items that could impact availability schedule, budget and/or resourcing.
5. Review Risk Management (identify, categorize, update and assign risk lead).
6. Apply historical cost returns and develop list of Work Notifications / Work Specifications which meet Management of Growth Reserve criteria in accordance with CNRMC 7570 Ser C400/121/NAVSEA 02 4205 Ser 02/205 Joint Memo of August 2015.
7. Review Strategies (PCD, Work Integration and Tank) - Enclosure (8).
8. Review Planning Status.
9. Review of Planning / draft Execution Key Event/Milestone schedule.
10. Review Event Readiness List (ERL).

Recommended Participants**Type Commander (TYCOM)**

- Type Desk Officer (TDO)
- Availability Work Package (AWP) Planner
- Port Engineer (PE)
- Combat Systems Port Engineer (CSPE)

Commander, Navy Regional Maintenance Centers (CNRMC)

- Representative

Regional Maintenance Center (RMC)

- Class Team Leader (CTL)
- Project Manager (PM)
- Ship Superintendent
- Assessment Director (AD)
- Alterations Installation Teams (AIT) Planner
- Administrative Contracting Officer (ACO)
- Project Support Engineer (PSE)
- Integrated Test Engineer (ITE)
- Ship Building Specialist (SBS)
- Quality Assurance Specialist (QAS)
- Project Officer (PO)

Planning Yard

- Representative

Space and Naval Warfare Systems Command (SPAWAR)

- Fleet Readiness Directorate (FRD), Installation Lead Representative
- OSIC

NAVSEA, Surface Warfare Directorate (SEA 21), Naval Surface Warfare Center (NSWC)

- Ship Platform Manager (SPM)
- Program Management Office Representative (PMR) Lead
- Combat Systems Project Engineer (CSPE)

Surface Maintenance Engineering Planning Program (SURFMEPP)

- Baseline AWP (BAWP) Manager
- Detachment Representative
- Platform Engineer

Ship

- CNO AVAIL Coordinator

Planning Activity (as applicable)

- Representative for Planning (Planning Division) and Execution (Operations Division)

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Agenda Items

- Introductions and Expectations (Facilitator)
- CO's Expectations (CO/PE)
- Review 50% P&E MSMO/50% 2-Kilo Lock for FFP Event Action Items (Facilitator)
- Planning Status Brief (PM)
 - o Where are we now - Understand status of Work Notifications (WN) screened, work items written, specs reviewed, specs approved, LLTM (GFM/CFM) status, PCPs developed, PCPs reviewed, PCPs approved, status of AITs, I Level and TA4 Work Items, ship check/SID status, PM concerns, current status of JFMM tailored Planning milestones and funding status
- Review of Class Maintenance, Modernization and "I" Level Work (PE/PMR/C900)
- BAWP/AWP planned assessments Brief (AWPM/SURFMEPP/AD)
- Update, revise and identify risks (Facilitator)
- Review ERL (Facilitator) - Enclosure (9)
- Review Project Team Strategies (Facilitator) - Enclosure (8)
 - o Review Strategies; PCD, Work Integration and Tank
- Review draft Execution Milestone Chart (Facilitator)
- ALO/BMDRA/CSLO Brief (as applicable)
- Develop list of Work Notification / Work Specifications which meet Management of Growth Reserve criteria in accordance with CNRMC 7570 Ser C400/121/NAVSEA 02 4205 Ser 02/205 Joint Memo of August 2015.
- Conduct WPIC (PM/PE)
- Plan date, time and venue for A-30 Readiness to Start (RTS) Event/WPER (Facilitator)

Deliverables

1. Completed WPIC Template
2. Review/Update Project Team Strategies - Enclosure (8)
3. End of Event Report - Enclosure (6)
4. Updated Action Items
5. Reviewed, updated and revised Risk Cards - Enclosure (8)
6. Updated planning / draft Execution Key Event/Milestone Chart
7. Updated ERL- Enclosure (9)

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A-30 RTS Event/WPER Requirements**Objectives**

1. Conduct WPER in accordance with COMUSFLTFORCOMINST 4790.3, Joint Fleet Maintenance Manual
2. Review LMA Integrated Schedule.
3. Review the approved Letters of Authorization (TYCOM/SEA21) and identify items that could impact availability schedule, budget and/or resourcing.
4. Review the Mandatory Technical Requirements (SURFMEPP) and identify items that could impact availability schedule, budget and/or resourcing.
5. Review the TYCOM Availability Work Package (AWPM) and identify items that could impact Availability schedule, budget and/or resourcing.
6. Update, revise and identify additional risks.
7. Sign Strategies - Enclosure (8).
8. Develop First 100 Hour plan.
9. Review NSA signed Readiness To Start letter.
10. Review Event Readiness List - Enclosure (9).

Recommended Participants**Type Commander (TYCOM)**

- Type Desk Officer (TDO)
- Availability Work Package (AWP) Planner
- Port Engineer (PE)
- Combat Systems Port Engineer (CSPE)

Commander, Navy Regional Maintenance Centers (CNRMC)

- Representative

Regional Maintenance Center (RMC)

- Class Team Leader (CTL)
- Project Manager (PM)
- Ship Superintendent
- Assessment Director (AD)
- Alterations Installation Teams (AIT) Planner
- Administrative Contracting Officer (ACO)
- Project Support Engineer (PSE)
- Integrated Test Engineer (ITE)
- Quality Assurance Supervisor (QAS)
- Safety Representative
- Ship Building Specialist (SBS)
- Project Officer (PO)

Planning Yard

- Representative

Space and Naval Warfare Systems Command (SPAWAR)

- Fleet Readiness Directorate (FRD), Installation Lead Representative
- OSIC

NAVSEA, Surface Warfare Directorate (SEA 21), Naval Surface Warfare Center (NSWC)

- Ship Platform Manager (SPM)
- Program Management Office Representative (PMR) Lead
- Combat Systems Project Engineer)

Surface Maintenance Engineering Planning Program (SURFMEPP)

- Baseline AWP (BAWP) Manager
- Detachment Representative
- Platform Engineer

Ship

- CNO AVAIL Coordinator
- Ship's Force Leadership

Lead Maintenance Activity (LMA)

- Representative for Planning (Planning Division) and Execution (Operations Division)

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Agenda Items

- Introductions/Expectations (Facilitator)
- 80% P&E / WPIC MSMO / 80% WPIC FFP Event Action Items (Facilitator)
- CO's Expectations(CO/PE)
- Planning Status Brief (PM)
 - o Where are we now - Understand status of definitization/award, new work items written/specs reviewed/specs approved, LLTM (GFM/CFM) status, PCPs (critical/non-critical) developed/reviewed/approved, status of AITs, I Level and TA4 Work Items, SID status, and PM concerns.
- Review of Class Maintenance, Modernization, "I/O" Level Work (PE/PMR/C900/SF)
- BAWP/AWP planned assessments Brief (AWPM/SURFMEPP/AD)
- Quality Management Plan (QMP) Brief (QAS)
- Contracting Requirements Do's and Don'ts Brief (ACO/CS)
- NRMO Brief (CNRMC)
- Lessons Learned Brief (LLC Lead/Facilitator)
- RMMCO brief (RMMCO)
- HAB Brief (HAB)
- ERL Brief (PM/Facilitator)
- Work Certification Brief (ITE)
- Technical Authority Brief (PSE)
- Total Ships Readiness Assessment (TSRA) Brief (AD)
- Corrosion Control/Work Specification Brief (TYCOM)
- Develop First 100hr Plan (Facilitator)
- Sign Project Team Strategies/Review RTS Risk Assessment Letter (PM)
- Conduct WPER (LMA)

Deliverables

1. Signed Strategies - Enclosure (8)
2. First 100 Hour Plan
3. End of Event Report - Enclosure (6)
4. Updated Action Items
5. Reviewed, updated and revised Risk Cards - Enclosure (8)
6. Updated ERL- Enclosure (9)

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Availability Completion Conference (C+21)**Objectives**

1. Review Work Package
 - a. TYCOM/SEA 21/RMC (I Level)- New work/late adds.
 - b. Outstanding/incomplete Ships Operational Verification Testing (SOVT).
 - c. Outstanding ILS issues.
 - d. RCC analysis (L/L into MSC and CSWT, top cost drivers).
 - e. Exceptions to AVAIL completion.
2. Review Financial Summary
 - a. Original controls vs final budget.
 - b. Original schedule vs actual schedule.
 - c. Funding on contract (current contract value) to complete exception items.
3. Review Work Certification status
 - a. Work Certification letter.
 - b. Current DFS list.
4. Review TSRA package
 - a. Assessments completed, deferred/waived.
5. Identify, discuss, and document Lessons Learned/ Best Practices.
6. Assess effectiveness of Risk Management.

Recommended Participants**Type Commander (TYCOM)**

- Type Desk Officer (TDO)
- Availability Work Package (AWP) Planner
- Port Engineer (PE)
- Combat Systems Port Engineer (CSPE)
- Lessons Learned Coordinator (LLC)
- NRMO

Space and Naval Warfare Systems Command (SPAWAR)

- Fleet Readiness Directorate (FRD), Installation Lead Representative
- OSIC

NAVSEA, Surface Warfare Directorate (SEA 21)**Commander, Navy Regional Maintenance Centers (CNRMC)**

- Representative

- Ship Platform Manager (SPM)
- Program Management Office Representative (PMR) Lead

Regional Maintenance Center (RMC)

- Class Team Leader (CTL)
- Project Manager (PM)
- Assessment Director (AD)
- Alterations Installation Teams Coordination Engineer (ACE)
- Administrative Contracting Officer (ACO)
- Project Support Engineer (PSE)
- Integrated Test Engineer (ITE)
- Quality Assurance Supervisor (QAS)
- Project Officer (PO)
- IMA Ship Superintendent
- Lessons Learned Coordinator (LLC)

Surface Maintenance Engineering Planning Program (SURFMEPP)

- Baseline AWP (BAWP) Manager
- Detachment Representative
- Platform Engineer

Ship

- CNO AVAIL Coordinator
- Ship's Force Leadership

Lead Maintenance Activity (LMA)

- Representative for Planning (Planning Division) and Execution (Operations Division) and Safety

Planning Yard

- Representative

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Agenda Items

- Introduction and expectations (PM/Facilitator)
- COs expectations (CO/PE)
- Review Work Package (PM)
 - o Review BAWP Status (SURFMEPP)
 - o New work
 - o Outstanding/Incomplete SOVT
 - o Outstanding ILS issues
 - o Review of exception items and expected completion dates
 - o RCC Analysis (Top cost drivers, L/L into MSC and CSWT)
- Review Financial Summary (PM)
 - o Original controls vs. final budget
 - o Funding on contract (current contract value) to complete exception items
- Review Work Certification Status (PM/PSE)
 - o Letter
 - o DFS
- Review Assessment Status (PM/AD)
 - o Completed, deferred/waived
- Review effectiveness of risk management (PM)
- Review ERL
- Capture Lessons Learned (TYCOM LLC Analysis Team Rep)
- LMA (PM) and Ship CO final remarks
- NSA (PM) closing remarks

Deliverables

1. End of Event Report- Enclosure (6)
2. Exceptions to AVAIL completion (including ECD and funding requirements)
3. Detailed DFS, waiver, and deviation list for next FRP/AWP development
4. Initial Lessons Learned/Best Practices
5. Assessments not completed

End of Event Report Template

Facilitators: XXXX XXXX and XXXX XXXX

Highlights: *All Events*

- Schedule
- Cost

Key Takeaways of Maintenance, Modernization, and Repair Package, Planning Status Brief and Milestones: *All Events*

Work Package/Milestone Discussion: *All Events*

- Planning and Execution Milestone Chart.

Risk and Mitigation: *All Events*

Action Items:

XXXX Project Team Action Items Listing				
Item Number	Description	Assigned	Due	Status
01	XXXXXX	XX	XX	
02	XXXXXX	XX	XX	
03	XXXXXX	XX	XX	

Strategy Assignments/Due/Status: 50% P&E, 80% WPIC, A-30 WPER

- PCD - Who: XX / When: XX
- Risk Mitigation/Management - Who: XX / When: XX
- Work Integration - Who: XX / When: XX

Team Members Absent from IPTD Event: *All Events*
List

Next Meeting:

- When is the next event

Prepared By: _____
IPTD Facilitator Lead

Date: _____

Reviewed By: _____
TYCOM Port Engineer

Date: _____

Approved By: _____
RMC Project Manager

Date: _____

Enclosure (6)

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End of Event Report Template (C+21 only)

Facilitators: XXXX XXXX and XXXX XXXX

Highlights: All Events

Key Takeaways of Maintenance, Modernization, and Repair Packages:

- Exceptions to AVAIL completion (including ECD and funding requirements).
- Detailed DFS, waiver and deviation list for next FRP/AWP development.
- Initial Lessons Learned (to include RCC Analysis)/Best Practices List

Assessment of Work Package/Execution Milestones: All Events

- Planning and Execution Milestone Chart.

Action Items:

XXXX Project Team Action Items Listing				
Item Number	Description	Assigned	Due	Status
01	XXXXXX	XX	XX	
02	XXXXXX	XX	XX	

Team Members Absent from IPTD Event: All Events

- List

Prepared By: _____
IPTD Facilitator Lead

Date: _____

Reviewed By: _____
TYCOM Port Engineer

Date: _____

Approved By: _____
RMC Project Manager

Date: _____

24 Sep 15

Tailored Milestone Message Template

FM XXRMC
 TO "TYCOM"//N43//
 COMNAVSEASYS COM WASHINGTON DC//SEA 21//
 INFO "FLT CMDR"//N43//
 COMNAVRMC NORFOLK VA
 COMNAVNETWARCOM NORFOLK VA
 COMNAVSUPSYSCOM MECHANICSBURG PA
 COMSPAWARSYSCOM SAN DIEGO CA
 COMSPAWARSYSCOM FRD SAN DIEGO CA
 NAVICP MECHANICSBURG PA
 NAVSURFWARCEN SHIPSYSENGSTA PHILADELPHIA PA
 NAVSURFWARCENDIV PORT HUENEME CA
 PEO IWS WASHINGTON DC
 PEO C41 SAN DIEGO CA
 SPAWARSYSCEN ATLANTIC CHARLESTON SC
 SPAWARSYSCEN PACIFIC SAN DIEGO CA
 SURFMEPP PORTSMOUTH VA
"APPLICABLE PLANNING YARD"
 ISIC
 USS ALWAYS SAIL
 XXRMC
 BT
 UNCLAS MSGID/GENADMIN//XXRMC/-/-/- /--//
 SUBJ/USS ALWAYS SAIL (DDG XXX) FY16 SRA JFMM TAILORED MILESTONES//
 REF/A/MSGID:INST/COMUSFLTFORCOM 4790.0/-/YMD:20150425//
 REF/B/MSGID:INST/CNRMCINST 4790.4B/-/YMD:20150924//
 REF/C/MSGID:DOC/COMNAVRMC/YMD:20140820//
 NARR/REF A IS JOINT FLEET MAINTENANCE MANUAL REV C CH-3. REF B IS INTEGRATED
 PROJECT TEAM DEVELOPMENT (IPTD) INSTRUCTION. REF C IS A-360 IPTD END OF EVENT
 REPORT.//
 POC/JOHN DOE/PROJECT MANAGER/UNIT:XXRMC/NORFOLK VA /TEL:757-555-0000//
 GENTEXT/REMARKS/1. FOR OFFICIAL USE ONLY - THIS MESSAGE CONTAINS BUSINESS
 SENSITIVE INFORMATION. THIS TAILORED MILESTONE MSG SUBMITTED IN ACCORDANCE
 WITH REFS A THRU C.

2. AVAILABILITY OVERVIEW:

A. GENERAL

CNO DATES DDMMYY-DDMMYY (XXX DAYS)

CONTRACT DATES DDMMYY-DDMMYY (XXX DAYS)

B. KEY EVENT PLANNING MILESTONES BASED ON DISCUSSIONS/CORRESPONDENCE IN
 PARA 2 AND REF B AS GUIDANCE. RESPONSIBLE ACTIVITY IS MAINTENANCE TEAM, LED
 BY PROJECT MANAGER AND PORT ENGINEER, UNLESS OTHERWISE LISTED:

TASK/MILESTONES	RESP ACTIVITY	JFMM A-DATE	TAILORED A-DATE	TAILORED MILESTONE DATE
100% BAWP	TYCOM	A-410	A-410	DDMMYY
TASK/FUND SID DEVELOPMENT	SYSCOM	A-330	A-390	DDMMYY
TYCOM LOA	TYCOM	A-360	A-360	DDMMYY
REQUEST AVAIL FUNDING FOR PLANNING	RMC 300	A-345	A-345	DDMMYY

Enclosure (7)

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Tailored Milestone Message Template (cont'd)

50% OF D-LEVEL MAINT WORK PKG 2K'S				
BROKERED BASED ON TARGET CONTROL	RMC C300	A-240	A-305	DDMMYY
50% LOCK	IPTD	A-240	A-305	DDMMYY
COMP PLAN AND ESTIMATE OF WORK				
ASSIGNED BY THE 50% PKG DEVELOPMENT				
MILESTONE PLANNING	A-190	A-275		DDMMYY
IDENTIFICATION OF AIT SUPPORT				
REQUEST REQUIREMENTS AND POA&M	A-180	A-271		DDMMYY
ESTABLISH AVAILABILITY KEY EVENT				
AND MILESTONE SCHEDULE	A-265	A-265		DDMMYY
IGE SUBMITTED IP SUPPORT OF 50%		A-245		DDMMYY
ISSUE/DELIVER SIDS TO NSA FOR				
KTRS AND AITS	PLAN YD	A-180	A-240	DDMMYY
80% OF D-LEVEL MAINTENANCE WORK PKG				
DEVELOPMENT 2K'S HAVE BEEN BROKERED				
BASED ON TARGET CONTROL		A-155	A-225	DDMMYY
PLANNING KTR COMP PLANNING AND				
ESTIMATING OF WORK ASSIGNED AS				
REQUIRED BY THE ABOVE 80%				
LOCK MILESTONE PLANNING		A-130	A-205	DDMMYY
80% LOCK IPTD		A-210	A-202	DDMMYY
IGE SUBMITTED IP SUPPORT OF 80%			A-190	DDMMYY
DEFERRAL LETTER TYCOM N43			A-175	DDMMYY
100% OF D-LEVEL MAINTENANCE WORK PKG				
2K'S LOCKED BASED ON TARGET CONTROL		A-170	A-175	DDMMYY
WPIC ANNOUNCEMENT MESSAGE			A-175	DDMMYY
100% PLANNING AND ESTIMATING				
COMP PLANNING		A-155	A-160	DDMMYY
IGE SUBMITTED IP SUPPORT OF 100%		A-154	A-150	DDMMYY
CONDUCT WPIC		A-165	A-145	DDMMYY
RISK LETTER			A-140	DDMMYY
SOLICIT BIDS			A-135	DDMMYY
SUBMIT BIDS			A-104	DDMMYY
AWARD AIT CONTRACTS FOR WORK NOT BEING				
DONE BY THE PRIME KTR. IDENTIFY ALL OUTSIDE				
ACTIVITIES PARTICIPATING IN AVAILABILITY AND				
ASSOCIATED SUPPORT REQUIREMENTS			A-90	DDMMYY
RISK LETTER			A-60	DDMMYY
AWARD CONTRACT			A-60	DDMMYY
POST AWARD IPTD			A-55	DDMMYY
A-30/WPER IPTD (2DAYS)			A-30	DDMMYY
START OF AVAILABILITY		A-0	A-0	DDMMYY
//BT				

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**Project Team Strategy for Production Completion Date (PCD)/Combat Systems
Production Completion Date (CSPCD)**

USS XXXX FYXX SRA Project Management Plan

**Production Completion Date (PCD)/Combat Systems Production Completion Date
(CSPCD) Strategy**

1. Responsibility. The USS XXXX RMC Project Manager (PM) has responsibility for the development, communication, dissemination, maintenance and execution of this strategy.

2. References

- (a) COMFLTFORCOMINST 4790.3, Joint Fleet Maintenance Manual (JFMM)
- (b) COMNAVSURFLANT NORFOLK VA 102014Z JAN 14, CNO End of Availability Key Event Scheduling Expectations Naval Message
- (c) COMNAVSURFPAC SAN DIEGO CA 192022Z MAR 15, CNO Availability Production Completion Date (PCD) Naval Message
- (d) Surface Ship Availability Project Team Handbook

3. Enclosures

- (1) Key Events/Milestones for PCD

4. Purpose. The PCD/CSPCD Strategy defines what Key Events and Milestones in Enclosure (1) will be managed by the USS XXXX Project Team members and other stakeholders. It will also establish the following: Work Items required to be completed for PCD/CSPCD.

5. Background. Past availabilities indicate there are a variety of issues that prevent PCD/CSPCD from being met. Issues that need to be reduced in order to support meeting PCD/CSPCD are:

- Improper closeout of tanks and voids
- Unexpected/Significant growth work
- On-going work in Main Spaces
- Space turn-over
- Incomplete testing (cold plant)
- Ship's Force unable to access the Main Spaces
- Main space cleanliness

6. Discussion

a. Production Completion Date (PCD). Engineering plant Production Completion Date (PCD) is an availability key event that provides sufficient time for the necessary steps to be taken by Ship's Force to shift from a maintenance environment back to operations. It is the intent that all major work and cold plant testing in all main propulsion and auxiliary spaces will be complete by all maintenance providers by the scheduled engineering plant PCD. The time reserved between PCD and propulsion plant light off is set aside to allow Ship's Force to complete pre-event certifications, clearance of tagouts, complete any remaining discrepancy corrections, continued deep

Enclosure (8)

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cleaning, small valve maintenance, Ship's Force startup maintenance, valve lineups, temporary service removal, and, if required, any groom teams in areas requiring special emphasis. This time is necessary to allow Ship's Force to transition to an operational environment and focus on necessary training and complete final preparations for the Light Off Assessment (LOA)/propulsion plant light off. For availabilities in excess of 120 days (140 days for forward deployed CVNs), PCD will be scheduled 14 days prior to the LOA. For availabilities 120 days or less (140 days for forward deployed CVNs), PCD will be scheduled between 3-14 days prior to propulsion plant light off. The ship's CO, Chief Engineer and maintenance provider's senior Project Manager will determine the number of days needed between PCD and propulsion plant light off for availabilities 120 days or less (140 days for forward deployed CVNs) based on the scope of work, length of availability and other pertinent factors. PCD will not be less than 3 days prior to propulsion plant light off regardless of whether a LOA is scheduled. Generally LOAs will be scheduled for availabilities greater than 120 days. For availabilities 120 days or less (140 days for forward deployed CVNs), the requirement for a LOA will be determined by the TYCOM.

b. Combat Systems Production Completion Date (CSPCD) (AEGIS Light Off for AEGIS ships) (Surface Force Ships Only). A Key Event to document all production work supporting uninterrupted Combat Systems testing is complete. Combat Systems Production Completion Date (CSPCD) is defined as met when production work in designated compartments and support systems is completed to the degree required to support uninterrupted testing, once started, and start of selected stage 3 Combat Systems tests. For compartments, the degree required includes final paint, completion of compartment air testing and final painting of supporting fan rooms. For support systems, which are ship-wide distributed in nature, the degree required includes complete installation of the branches supporting the Combat Systems and completion of support systems test procedures or applicable portions of the support system test procedures such that the support equipment is operating within design parameters.

(1) Compartments and Support Systems required for support of stage 3 testing.

(a) For non-AEGIS ships, the compartments and support systems required for support of stage 3 Combat Systems testing is class specific and shall be agreed upon by the government and contractor prior to the start of the availability.

(b) For AEGIS ships, the designated compartments and support systems are listed in reference (b), Section 092, Table I (for DDG-51 class ships) and Table II (for CG-47 class ships). The selected stage 3 or Operational Verification Tests to be conducted as part of AEGIS Light Off are to be identified in the Total Ship's Test Program along with the time phased sequence of AEGIS Modernization Team (AMT) (if assigned) testing activities.

(2) The NSA must certify all related work and testing is completed for AEGIS Light Off/CSPCD, with any exceptions noted and approved by the appropriate technical authority and agreed to in writing by the Ship's CO, Project Manager, TYCOM, and the NSA.

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(3) To declare the CSPCD key event met, all heavy industrial work in given compartments must be complete including, but not limited to, hot work, cutting, grinding, deck work (Terazzo, NOMEX) and spray painting. Access routes need not be released but must be passable or alternate routes made to the Combat Systems Suite available at all times. Services, either ship or shore based, must be available on a reliable basis. These services may include (based on ship class): 60HZ/400HZ, Air Conditioning, Chilled Water, condensate drains, Firemain or AEGIS Salt Water Cooling pumps, Ventilation, Electronic Cooling Water (demineralized water), Dry Air, High Pressure Air, Low Pressure Air, FWD and AFT AN/SPY skids, SONAR skid, AN/SPS-49 skid, Command and Decision skid, AN/SLQ-32 Cooling unit and Close-In Weapons System heat exchanger. In addition the Electric Plant Control Equipment console or equivalent remote 400HZ control unit must be available. Cabling from 60HZ Power panels, Chilled Water hoses and routes must be intact to 400HZ power sources/converters. Electronic Cooling Water modifications must be completed and all contractor flushes accomplished. If in dock, overboard discharges for AC plants, Cooling skids and Firemain must be installed. Combat Systems testing shall not begin in a compartment which has not been formally turned over and accepted by the Supervisor without permission of the PEO Integrated Warfare System (IWS)/SEA 21 Combat Systems Project Engineer (CSPE) (if assigned) and the Supervisor.

c. Light Off Assessment (LOA)/Hot Operations. In accordance with reference (b), LOA is typically scheduled two weeks after the PCD Key Event. The time reserved between PCD and propulsion plant light off is set aside to allow Ship's Force to complete, as a minimum, the following:

- Clearance of tag-outs
- Training
- Small valve maintenance
- Pre-event certifications
- Complete remaining discrepancy corrections
- Startup maintenance/check-off sheets
- Valve lineups
- Deep cleaning
- Removal of temporary services

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7. Signatures

[Add signature blocks as necessary. The CO and RMC PM signatures are **always** listed last.]

Prepared by:	_____ [Name, Position/Role] [Organization]	_____ Date
Concurrence:	_____ [Name, Position/Role] [Organization]	_____ Date
Concurrence:	_____ [Name, Position/Role] [Organization]	_____ Date
Concurrence:	_____ CAPT/CDR [Name] Commanding Officer, USS XXXX	_____ Date
Approved by:	_____ [Name, Position/Role] [Organization RMC Project Manager]	_____ Date

Project Team Strategy for Work Integration

USS XXXX FYXX SRA Project Management Plan

Work Integration Strategy

1. Responsibility. The USS XXXX Lead Maintenance Activity (LMA) Scheduler (Contractor Representative) and Regional Maintenance Center (RMC) Integrated Test Engineer (ITE) are responsible for the development, communications, dissemination, maintenance and execution of this strategy.

2. References

- (a) COMFLTFORCOMINST 4790.3, Joint Fleet Maintenance Manual (JFMM)
- (b) OPNAV NOTICE 4700, Representative Intervals, Durations, Maintenance Cycles, and Repair Man Days for Depot Level Maintenance Availabilities of U.S. Navy Ships
- (c) OPNAVINST 4700.7L, Maintenance Policy of United States Navy Ships
- (d) NAVSEA S9AAO-AB-GOS-010, General Specification for Overhaul of Surface Ships
- (e) NAVSEA Standard Item 009-60, Schedule and Associated Reports for Availabilities Over 9 Weeks in Duration; Provide and Manage
- (f) NAVSEA Standard Item 009-67, Integrated Total Ship Testing; Manage
- (g) NAVSEA Standard Item 009-81, Compartment Closeout; Accomplish

3. Attachments

- (1) Work Integration Communications RACI Chart.

4. Purpose. This strategy defines how the project will communicate work accomplished by the RMC's Prime Contractor and other maintenance providers including but not limited to: Ship's Force (S/F), RMC, Alterations Installation Teams (AIT), MSMO, and TYCOM sponsored contractors by using an integrated schedule.

5. Background. A proven practice shows that a successful Availability ensures all authorized work accomplished by maintenance providers is tasked such that the work breakdown structures supports the integrated schedule, work control, certification and the maintenance provider's requirements. Best practices include identifying and solving potential work conflicts between maintenance providers. This must be done in a timely manner in order to have minimal impact on production when using this strategy.

6. Discussion. The LMA Scheduler is tasked with developing an integrated project schedule that includes all significant work and testing authorized for accomplishment during this availability in accordance with references (a) and (g). The LMA Scheduler will review the schedule with all subcontractors, AITs and S/F for conflicts, integration, and sequencing of work and testing. The final schedule will be issued by A-30 in support of:

- a. Ship's Force habitability goals and requirements.
- b. Space turnover plan between Ship's Force and contractors in accordance with reference (g).
- c. Tanks and Voids; gas free and close out schedules.
- d. Temporary services required for crew habitability and production work.
- e. WAFs/Tag-Out plan and coordination.

Chart Key: R=Responsible (The Do'er), A= Accountable (The Buck Stops Here), C= Consulted (Input Before the Action), I= Informed (After the Action) REV 2 27 May 13	
Availability:	Who (Position, Title, Code)
ACTIVITY/ITEM	Project Manager Port Engineer Combat System PE Class Team Lead NSSA Code 900 (FM48) Lead SBS ACO QAS Project Support Engineer TSRA AD Integrated Test Engineer LMA Project Manager LMA Integration Manager LMA Schedule Manager LMA Advanced Planner LMA QA SPAWAR OSR AIT Coordinator (ACE) Planning Yard Rep SEA 21 PMR TDO TDA SURFMEPPREP AWP Manager PHO Combat Systems PE ESIC Rep CO XO CHENG SMMO Avail Coordinator STO EMO NNSY COE (Diesel)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

24 Sep 15

7. Signatures. [Add signature blocks as necessary. The CO and RMC PM signatures are **always** listed last.]

Prepared by:	_____ [Name, Position/Role] [Organization]	_____ Date
Concurrence:	_____ [Name, Position/Role] [Organization]	_____ Date
Concurrence:	_____ [Name, Position/Role] [Organization]	_____ Date
Concurrence:	_____ CAPT/CDR [Name] Commanding Officer, USS XXXX	_____ Date
Approved by:	_____ [Name, Position/Role] [Organization RMC Project Manager]	_____ Date

CNRMCIINST 4790.4B
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Project Team Strategy for Tanks

USS XXXX FYXX SRA Project Management Plan

Tank Strategy

1. Responsibility. The USS XXXX RMC Project Manager (PM) has responsibility for the development, communication, dissemination, maintenance and execution of this strategy.

2. References

- (a) COMFLTFORCOMINST 4790.3, Joint Fleet Maintenance Manual (JFMM)
- (b) NAVSEA Technical Manual T9630-AB-MMD-010, Corrosion Control Assessment and Maintenance Manual (CCAMM), Third Revision 31 December 2014
- (c) Surface Ship Tank and Void Time-Directed Maintenance Strategy, SURFMEPP ltr 4700 Ser 200/150 of 08 May 15

3. Enclosures

- (1) Tank Diagram
- (2) Tank Sequencing List

4. Purpose. The Tank Strategy defines what Key Events and Milestones in Enclosure (1) will be managed by the USS XXXX Project Team members and other stakeholders. It will also establish the following: Work Items required to be completed for CSPCD and PCD per references (a) through (c).

5. Background. Past Availabilities indicate there are a variety of issues that prevent tank open and inspects as well as assessments being conducted on time including proper sequencing/work integration, such as habitability, mast preservation, stability, and topside alterations.

6. Discussion

- a. Liquid load/Defueling Plan:
- b. Pre-Maintenance Survey (first 20% of AVAIL requirement per ref A):
 - (1) Tanks of Opportunity:
- c. Sequencing of Tanks/Inspection (Assessment) of Tanks:
 - (1) Tanks to be opened/cleaned/Gas Free:
 - (2) Fuel Banks affected:
- d. Repair of Tanks:

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(1) Blast and Paints:

(2) Structural Repairs:

(3) Coat Removals:

(4) Touch-ups:

e. Preservation of Tanks:

(1) Docker or Non-Docker:

(2) Space/Work that will affect Tank Work:

(3) Boundary Tanks:

(4) Auxiliary Spaces Work:

(5) Main Spaces Work:

(6) Top-side Alterations:

(7) Mast Preservation:

(8) HENL/BENL Work:

f. Mandatory Repair Before Closing (RBC) Tanks:

g. Strategy for Deferral/Growth Work:

h. Tank Close-Out Sequence:

i. Critical Path to CSPCD, PCD and Light-Off Assessment (LOA) Tank Work:

8. Tank Diagrams and Sequencing List. Best Practices/Lessons Learned of Project Teams extensive Tank Work/Assessments have indicated the use of diagrams and sequencing lists to assist in successful completion of the required work/Assessments. Enclosures (1) and (2) represent the Tank status and work sequencing for this Availability.

24 Sep 15

7. Signatures

[Add signature blocks as necessary. The CO and RMC PM signatures are **always** listed last.]

Prepared by:	_____	_____
	[Name, Position/Role]	Date
	[Organization]	
Concurrence:	_____	_____
	[Name, Position/Role]	Date
	[Organization]	
Concurrence:	_____	_____
	[Name, Position/Role]	Date
	[Organization]	
Concurrence:	_____	_____
	CAPT/CDR [Name]	Date
	Commanding Officer, USS XXXX	
Approved by:	_____	_____
	[Name, Position/Role]	Date
	[Organization RMC Project Manager]	

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Risk Card

Documentation for Reporting and Tracking Risk

Program Risk #: 1	Risk Lead:	Lead Organization: NSSA																																				
Risk Title:	Supporting Organizations:																																					
KE/MS:																																						
Description of Risk Condition:		Place X in one cell.																																				
Likelihood of Occurrence:		<table border="1"> <tr><td>E</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>D</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>C</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>B</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>A</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	E						D						C						B						A							1	2	3	4	5
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Consequence if Relized:																																						
Context (what, how, why, & where of risk condition):																																						
Current Progress / Notes:																																						
<table border="1"> <tr><td>Technical</td><td>Schedule</td></tr> <tr><td>Cost</td><td>ESH</td></tr> </table>		Technical	Schedule	Cost	ESH																																	
Technical	Schedule																																					
Cost	ESH																																					
Submitter:																																						
Phone:																																						
Email completed worksheet to Risk Manager.																																						

Risk Mitigation Plan

Action/Event (Include name of responsible organization and individual for each action)	Date (MM/DD/YY)		Success Criteria (Indicator that step is complete)	Risk Level if Successful	Comments	"X" if Step is Complete
	Start	Finish				
Action/Event:						<input type="checkbox"/>
Action/Event:						<input type="checkbox"/>
Action/Event:						<input type="checkbox"/>
Action/Event:						<input type="checkbox"/>
Action/Event:						<input type="checkbox"/>

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Event Readiness List (ERL Equipment)

Item No.	USS ALWAYS SAIL (CG-XX) DSRA FYXX DDMMYY - DDMMYY Work Item	Start Avail 10 Sept 14	Crew Move Ashore 15 Sept 14	Drydock Ship 18 Sept 14	Undock Ship 21 Sept 14	Crew Move Aboard 12 Jun 15	CSSE AVAIL 12 Jun 15	ALO 19 Jun 15	*PCD 26 Jun 15	LOA 13-17 Jul 15	*Dock Trial 17 Jul 15	*Fast Cruise 18 Jul 15	*Sea Trial 21 Jul 15	*End Avail/certify 24 Jul 15
000-00-001	Administrative Purposes; accomplish													X
077-11-001	Haz Waste Produced on Naval Vessels; control													X
110-11-001	Underwater Body Hull (Drydock); repair				X									
110-11-002	Structural Stiffeners; replace								X					
110-11-003	Bulkhead and Shell Plate Stiffener Repair; accomplish								X					
110-11-004	Port Gunwale; repair								X					
110-11-005	Structural Repair; accomplish								X					
110-11-006	Structural Repair; accomplish								X					
110-11-007	Structural Repair; accomplish								X					
110-11-008	Structural Repair; accomplish								X					
110-11-009	Structural Repair; accomplish								X					
110-11-010	Structural Repair; accomplish								X					
110-11-011	Structural Repair; accomplish								X					
110-11-012	Structural Repair; accomplish								X					
110-11-013	Structural Repair; accomplish								X					
110-11-014	Structural Repair; accomplish								X					
110-11-015	Structural Repair; accomplish								X					
110-11-017	Structural Repair; accomplish								X					
110-90-001	ShipAlt CG47-83307K, Increase Fatigue Strength, Frame 138, Modification to Structure; accomplish								X					
110-90-002	ShipAlt CG47-83390K, Reinforce Transverse Web Frame Structural Mod; accomplish								X					
110-90-003	ShipAlt CG47-00746K, Bulwark Aft 38 Feet Removal Mod to Structure; accomplish								X					
117-90-001	ShipAlt CG47-00386K, Modify Bulkhead Frame 248 at 03 Level Structural Mod; accomplish							X						
123-11-001	Fuel Oil Service, Fuel Oil Gravity and Fuel Oil Compensation Tanks; preserve								X					
123-11-002	Accessible Void; repair and preserve								X					
123-11-003	Fuel Oil Tank; repair								X					
123-11-004	Fuel Oil Expansion Tank; repair								X					
123-11-005	Fuel Oil Service Tank; repair								X					
123-11-006	Fuel Oil Receiving Tank; repair								X					
123-12-001	JP-5 Tank; repair								X					
123-14-001	Potable Water Tank; preserve					X								
123-14-002	Potable Water Tank; repair					X								
123-90-001	ShipAlt CG47-83059K, Fuel Oil Tank Crack, Structural Mod; accomplish								X					
130-11-001	Aircraft Securing Fitting, Trimetallic; replace					X								
140-11-001	400HZ Converter Room Deck Inspection; accomplish						X							
140-11-002	Auxiliary Machinery Room Number One Deck Plate; repair								X					
150-11-003	Vent Plenum; repair					X								
150-11-004	Gas Cylinder Stowage Rack; replace								X					
150-11-005	Superstructure Crack Repair; accomplish								X					
150-11-006	Bi-metallic Strip; replace								X					
150-11-007	Ultrasonic Impact Treatment (UIT); accomplish								X					
150-90-001	ShipAlt CG47-00440K, Deckhouse Side at Frame 258 Mod to Structure; accomplish							X						
150-90-002	ShipAlt CG47-00388K, 04 Level Service Platform Modification; accomplish (Option Item)							X						

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150-90-003	ShipAit CG47-00387K, 01 Level Jagged Bulkhead Modification; accomplish				X									
150-90-004	ShipAit CG47-00681K, Catwalk Starboard 04 Level; remove							X						
150-90-005	ShipAit CG47-83186K, 02 to 04 Level Structural Improvement and Modification; accomplish							X						
163-11-001	Sea Chest and Silencing Chamber; repair			X										
165-11-002	Removal and Disposal of Sonar Dome Water; accomplish			X										
165-11-003	Sonar Dome Access Scuttle; repair			X										
165-11-004	Sonar Dome Rubber Window (SDRW); repair			X										
167-11-001	Boiled Access Assembly; replace			X										
167-11-002	Vestibule Deck Hatches; repair							X						
167-11-003	Louvered Door; repair							X						
167-11-004	Door, Steel, Raised, Individual Dog; repair									X				
167-12-001	Hatch; replace									X				
167-12-002	Hatch; replace									X				
167-12-003	Hatch, Steel, Raised, Individual Dog; repair									X				
167-21-001	Ballistic Scuttle; replace									X				
168-12-001	Port Quarterdeck Door; replace									X				
168-12-002	Double Door, Aluminum, Exterior, Individually Dogged; repair									X				
168-90-001	ShipAit CG47-83308K, Aluminum Door Upgrade Mod; accomplish									X				
171-11-001	Halcyon Padeye; replace							X						
171-11-002	Main Mast; repair							X						
187-11-002	Nuke Launcher Removal, Inspection and Installation; accomplish							X						
243-11-002	Stern Tube Seal; repair			X										
243-11-003	Port and Starboard Shafting; repair			X										
243-80-001	ShipAit CG47-77239D, Main Propulsion Shaft Torsion Meter Modification; accomplish								X					
251-11-001	Gas Turbine Module (GTM) and Ship's Service Gas Turbine Generator (SSGTG) Intake Louvers Clean and Preserve; accomplish								X					
251-12-001	Gas Turbine Main (GTM) 2B Combustion Air Intake Module Coaming; remove								X					
251-31-001	Combustion Air Intake; preserve							X						
251-31-002	Combustion Air Intake; preserve							X						
251-90-001	ShipAit CG47-78449K, Modification to Structure; accomplish							X						
259-11-001	Gas Turbine (GTRB) Exhaust Duct Collector; repair								X					
259-90-001	ShipAit CG47-83170K, Remove Bliss Caps; accomplish							X						
259-90-002	ShipAit CG47-73547K, Ship Service Gas Turbine Generator, (SSGTG), Uptake Exhaust Duct and Ladder Mod; accomplish							X						

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261-11-001	Remote Valve Operator Assembly; repair								X					
262-11-001	Main Lube Oil Cooler; chemical clean								X					
311-33-001	Gas Turbine Generator Resilient Mount; replace								X					
320-11-001	Cableway; repair								X					
320-11-002	ShipAit CG47-00765K MK38 Power System Mod; accomplish (Partial)						X							
320-11-003	Cable Hanger; replace								X					
320-90-001	CG 47 Class AER 60169 Thermal Oven; remove								X					
321-11-001	Shore Power Station; repair						X	X						
321-11-002	Gas Turbine Module (GTM) 1A Blow-In Door Power Supply Cable; replace								X					
324-80-001	CG47 Class AER 68127, Automatic Bus Transfer (ABT) Switch Modification; accomplish				X									
331-11-001	Light switch Box; replace				X									
343-11-001	Ship Service Gas Turbine Generator (SSGTG), Lube Oil Cooler and Starter Air Cooler; clean								X					
343-11-002	Gas Turbine Modules (GTM) and Gas Turbine Generators (GTG) Inlet Moisture Separator Blow-In Door; repair								X					
343-13-001	Gas Turbine Generator Combustion Air Intake; preserve								X					
343-13-002	Number 2 Gas Turbine Generator Combustion Air Intake; preserve								X					
437-90-001	ShipAit CG47-83356K, Radar Tank Level Indicator (TLI) Upgrade; accomplish								X					
437-90-002	ShipAit CG47-83372K, TDR TLI Installation; accomplish								X					
443-90-001	ShipAit CG47-00706K, Replace Air Horn with Electric Horn; accomplish						X							
456-11-001	HS-1014/SPY-1 Cooling Skid Heat Exchanger; repair					X								
463-11-001	AN/SQS-53D (V2) Sonar Transducer and Stave Cable; replace			X										
465-11-001	Bathothermograph (XBT) Launcher Adapter; repair								X					
471-11-001	AN/SLQ-32 Band One Antenna Platform Removal; accomplish						X							
471-11-002	Maintenance Platform; preserve						X							
472-11-001	Passive Countermeasure System (PCMS) Material; install						X							
482-11-001	MK 82 Mod 0, Gun Guided Missile Director Installation Support; provide						X							
482-37-001	Harpoon Launcher Support Structure and Foundation; preserve						X							
505-11-001	Silicon Aluminum Bronze (SAB) Union Fittings; repair								X					
512-11-001	Vent Plenum Access Cover; replace				X									
512-11-002	Ventilation Duct Cleaning; accomplish				X									
512-11-003	Emergency Air Damper/Louver and Remote Operator Linkage; repair								X					
512-11-004	Fan Room and Vent Plenum; repair				X									
512-90-001	ShipAit CG47-83357K, Disposable Ventilation Filter; accomplish				X									
513-90-001	ShipAit CG47-83208.02K, Emergency Air Damper Modification; accomplish								X					

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514-11-001	Gravity Cooling Coil; replace				X									
514-11-002	Fan Coil Unit; repair				X									
514-11-003	Gravity Cooling Coil; replace				X									
514-80-001	ShipAit CG47-77814D, AC Plants Helian Strainers; accomplish				X									
514-90-001	ShipAit CG47-00440K, Deckhouse Side at Frame 258 Mod to Structure; accomplish					X								
516-11-001	Refrigeration Plant Compressor; repair				X									
520-11-001	Sea Valve/Waster Sleeve Repair and Replace; accomplish			X										
520-20-001	Underwater Log Sea Valve Assembly; repair			X										
523-11-001	Countermeasure Washdown (CMWD) Pipe Hanger; replace									X				
524-90-001	ShipAit CG47-83262K, Heat Exchanger Lay-Up Isolation; accomplish					X								
524-90-002	ShipAit CG47-83259K, Seawater Heat Exchanger, Fresh Water Lay-Up Mod;					X								
526-11-001	Weather Deck Drain Piping; replace							X						
528-11-001	Remote Valve Operator; repair				X									
529-11-001	Damage Control Dewatering Overboard Discharge Connection; replace							X						
531-11-001	Reverse Osmosis High Pressure Pump; repair							X						
532-11-001	Cooling Skid Demineralized Water System Chelate Flush; accomplish					X								
534-11-001	Unused Steam Piping; remove				X									
542-90-001	ShipAit CG47-83370K, JP-5 Hose Reel Motor Removal; accomplish							X						
551-11-001	Low Pressure Air Manifold; repair					X								
551-51-001	High Pressure Air Compressor (HPAC) Overhaul; accomplish						X							
551-61-001	Masker Air System; repair			X										
561-11-001	Hydraulic Power Unit (HPU) Oil Cooler Chemically Clean; accomplish							X						
562-11-001	Rudderstock, Rudder Bearing Seal and Rudderstock Seal; repair			X										
562-11-002	Rudder Structural Repair; accomplish			X										
571-31-001	Bulkhead Mounted Sliding Padeye Receiving Unit; overhaul									X				
581-11-001	Anchor and Anchor Chain; repair									X				
582-90-001	ShipAit CG47-00686K, Roller Chock Replacement; accomplish							X						
583-11-001	Starboard Boat Davit Handling System; repair									X				
583-11-002	Vest Boat Davit Assembly; repair									X				
583-90-001	ShipAit CG47-00710K, Port and Starboard Boat Boom Rigout; accomplish									X				
588-21-001	Helicopter Hangar Door Refurbishment Assistance; provide									X				
593-11-001	Waste Surge Tank Manhole Cover and Bolting Ring; preserve				X									
593-13-001	Collection, Holding and Transfer, (CHT), Tank and Waste Surge Tank Preservation and Repair; accomplish				X									
593-90-001	ShipAit CG47-83314K, Collection Holding Tank System Modifications; accomplish				X									
612-11-001	Life Line Stanchion Assembly; replace									X				
612-11-002	Fantail Life Rail Assembly; replace									X				
612-11-003	Liferaill Socket Assembly; replace									X				

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622-11-001	False Deck Panel (NOMEX); replace							X						
623-11-001	Inclined Ladder; replace				X									
623-12-001	Climber Safety Device Side Dismount Fittings; install							X						
623-12-002	Verticle Ladder; replace							X						
623-21-001	Accommodation Ladder; inspect								X					
625-11-001	Portlight; replace									X				
631-11-001	HD-1014/SPY Electronic Cooling Skid Deck; preserve					X								
631-11-002	Vertical Conveyor Trunk; preserve									X				
631-12-001	Chain Locker Repair and Preservation; accomplish									X				
631-12-002	Machinery Room Bilge Area; preserve							X						
631-13-001	Fan Room Deck; preserve				X									
631-13-003	Interior Compartment; preserve				X									
631-13-004	Forward and Aft Stack 04 Level Interior; preserve						X							
631-13-005	Interior Compartments; preserve				X									
631-13-006	Verticle Launching System (VLS) Fan Room Deck; preserve						X							
631-21-001	Mast Preservation; accomplish						X							
631-21-002	Partial Superstructure Preservation; accomplish						X							
631-21-003	Gas Turbine Main Exhaust Pipe Exterior; preserve						X							
631-21-004	Exterior Preservation; accomplish						X							
631-24-001	Fuel Oil Tank; preserve							X						
631-31-001	Underwater Hull Preservation; accomplish			X										
631-41-001	Freeboard Preservation; accomplish			X										
631-90-001	ShipAit CG47-83283K, Corrosion Control Enhancement; accomplish				X									
633-21-001	Impressed Current Cathodic Protection (ICCP) System; repair			X										
634-11-002	Ammunition Pallet Staging Room Nonskid; replace						X							
634-21-001	Fantail Nonskid; replace									X				
634-90-001	ShipAit CG47-00685K, Compartment Deck Covering Replacement; accomplish				X									
638-11-001	Refrigerated Space Doors; replace				X									
639-90-001	ShipAit CG47-83306K, Delete Radiation Shielding; accomplish				X									
643-11-001	Habitability Repairs; accomplish				X									
651-11-002	Scullery Dishwasher; replace				X									
651-90-001	ShipAit CG47-83409K, Advanced Food Service; accomplish				X									
655-11-001	Laundry Washer/Extractor and Drying Tumbler; replace				X									
663-11-001	Locker, Cabinet; replace						X							
665-90-001	ShipAit CG47-83343K, Band Saw; replace							X						
671-11-001	Line Shaft Bearing Stowage Case; replace							X						
721-31-001	Vertical Launching System (VLS), MK 41 Launcher Top and Uptake Hatch; preserve						X							

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721-31-002	Vertical Launching System (VLS) Magazine Sub-Base; preserve						X							
751-11-001	Torpedo Firing Door; repair						X							
763-11-001	Ready Service Locker; repair						X							
772-22-001	Ammunition Strikedown Elevator; repair						X							
772-80-001	CG47 Class AER 68144, Ammunition Elevator Hatch Air Motor Exhaust Mod; accomplish						X							
844-31-001	Combat System Test Discrepancies; correct													X
897-11-001	MSMO Availability Management and Support Service; provide													X
980-11-001	Light Off Assistance (LOA); provide									X				
980-11-002	AN/SPY Radar Array Face Resurfacing Support Services; provide						X							
982-31-001	Dock Trail, Fast Cruise, and Sea Trial; accomplish													X
992-11-001	Ship's Force Parking in Contractor's Facility; provide				X									
992-11-002	Temporary Service in Contractor Facility for YRBM (L) Barge; provide				X									
992-11-003	Temporary Services in Drydock; provide				X									
992-11-004	Fire Prevention Requirements; accomplish													X
992-29-001	Regional Maintenance Center (RMC) Office Space; provide				X									
992-31-001	Cleaning and Pumping; accomplish													X
992-31-002	Demineralized Water; provide													X
993-11-001	Rigging and Crane Service; provide						X							
993-22-001	Rigging, Crane and Transportation Service													X
997-11-001	Drydocking and Undocking; accomplish				X									

	MS/KE	Original Due Date	Revised Due Date	Actual Completion Date	Risk(s) to Making MS/KE
1	Start Availability				
2	Dry Dock Ship				
3	Open Tank Group I				
4	Open Tank Group II				
5	Open Tank Group III				
6	All Tanks Open				
7	Unship Shafts				
8	Unship Rudders				
9	Remove all Sea Valves				
10	Remove WTDs for IMA repair				
11	Install Shafts				
12	Install Rudders				
13	Close Underwater TAOs				
14	All Assessments Complete				
15	25% Conference				
16	All Hoses Delivered to IMA				
17	Install all Sea Valves				
18	All Ship-to-Shop items delivered to IMA				
19	Complete U/W Hull Preservation				
20	Undock Ship				
21	Install all CANES Equipment				
22	Install all SHIPALT 2 (e.g., NMT) Equipment				
23	Identify AVCERT Discrepancies				
24	Remove All Antennas				
25	50% Conference				
26	Install Scaffolding Forward				
27	Install Scaffolding Aft				
28	Install All Scaffolding				
29	Commence Flight Deck Non-Skid				
30	Install Watertight Doors				
31	All IMA Hoses Installed				
32	Turnover Machinery Spaces				
33	PCD				
34	Light Off A/Cs				
35	Restore CW				
36	Restore Ventilation				
37	Restore PW				
38	Restore LP air / Dry Air				
39	Restore 400 HZ system				
40	Air/Power/Water ready to support Aegis/CS Light Off				
41	CANES Light Off Complete (NIPR and SIPR)				
42	CANES Migration Complete (NIPR and SIPR)				
43	"System 2" Light Off				
44	"System 3" Light Off				
45	"System 4" Light Off				
46	Remove Scaffolding Aft				
47	Remove Scaffolding Forward				
48	Remove All Mast Scaffolding				
49	Conduct DCMA				
50	Conduct Mock LOA				

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	MS/KE	Original Due Date	Revised Due Date	Actual Completion Date	Risk(s) to Making MS/KE
51	Commence Light Off Assessment				
52	Complete Flight Deck Non-Skid				
53	75% Conference				
54	Close Tanks Group I				
55	Close Tanks Group II				
56	Close Tanks Group III				
57	Install All Antennas				
58	Commence Aegis/CS Light Off				
59	Complete Space Turnover Group I				
60	Complete Space Turnover Group II				
61	Complete Space Turnover Group III				
62	Complete Space Turnover Group IV				
63	Complete Space Turnover Group V				
64	All Spaces Turned Over				
65	All Work Complete				
66	Commence Crew Move Aboard				
67	Commence Testing System 1				
68	Commence Testing System 2				
69	Commence Testing System 3				
70	Commence Testing System 4				
71	Identify NAVCERT discrepancies				
72	Complete AVCERT discrepancy repairs				
73	Complete NAVCERT discrepancy repairs				
74	Close all MCTs				
75	Complete AVCERT				
76	Complete NAVCERT				
77	Conduct DFS Review				
78	Refuel Ship				
79	All Testing Complete				
80	Move to NAVSTA				
81	Certify Ship for Dock Trials				
82	Dock Trials				
83	Fast Cruise				
84	48-hour crew rest				
85	Crew Certification Complete				
86	Certify Ship for Sea Trials				
87	Ktr Sea Trials				

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