



14 JAN 2020

From: Director, NAVSEA Standard Specification for Ship Repair and Alteration Committee (SSRAC)

Subj: FISCAL YEAR 2021 CH-1 NAVSEA STANDARD ITEMS

Ref: (a) COMUSFLTFORCOMINST 4790.3

(b) NAVSEAINST 9070.1

Enclosure (1): NSI, 009-26, 009-60, 009-74 and 009-124 Summary of Change FY 21 CH-1

1. Per references (a) and (b), the Fiscal Year 2021 (FY21 CH-1) NAVSEA Standard Items (NSI) are available on the official SSRAC Web site at:

<http://www.navsea.navy.mil/Home/RMC/CNRM/OurPrograms/SSRAC.aspx>

2. The **FY-21 CH-1** NSIs are effective for availabilities in which FY-21 Standard Items are invoked. FY-21 availabilities that are not at the 100% of D Level Maintenance Work Package Lock Milestone must be planned to incorporate **FY-21 CH-1** NSIs listed. **FY-21 CH-1** NSIs must supersede all related CSWTs, SWTs, and LWTs.

FY-21 CH-1 NSIs Affected: 009-26, 009-60, 009-74 and 009-124 Summary of change in Enclosure (1)

- a. 009-26 Deck Covering; accomplish
- b. 009-60 Schedule and Associated Reports for Availabilities Over 9 Weeks in Duration; provide and manage
- c. 009-74 Occupational, Safety and Health Plan; accomplish
- d. 009-124 Thermal Spray Nonskid Application; accomplish

3. SSRAC and RMC Coordinators are responsible for advising users within their command of this notice. Code 400 Contracts Department is responsible for advising Master Ship Repair (MSR) Contractors and Agreement for Boat Repair (ABR) Contractors under their cognizance of the availability of these products.

4. The requirements of this letter do not authorize any change in terms, conditions, delivery schedule, price, or amount of any Government contract. In the event you consider the requirements represent a change for which an equitable adjustment is in order, you are to advise the Contracting Officer of the particular technical or contractual requirements regarded as



changed, and take no action with regard to such changed requirements until notified in writing of the Contracting Officer's response.

5. Point of Contact for further information is Mr. Aaron Simmons, Technical Director, 757-400-0020, james.a.simmons3@navy.mil.

A handwritten signature in black ink, appearing to read "A. Simmons", is positioned above the printed name.

James A. Simmons

Distribution:
SSRAC E-Mail



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009-26 Deck Covering; accomplish

3.7 Added... For components less than 1 inch from deck covering, the required surface preparation and primer application must be completed up vertical surfaces at the same height that the decking system will be installed.

3.7.2 Added... For components less than 5 inches from deck, the required surface preparation and primer application must be completed up vertical surfaces at the same height where waterproof membrane will be installed.

009-60 Schedule and Associated Reports for Availabilities Over 9 Weeks in Duration; provide and manage

3.1.2.1 Added... The preferred relationships between linked predecessor and successor activities is Finish-to-Start. The use of scheduling Lags and Leads should be minimized.

3.1.2.2 Added..., ensure milestones are linked to the Key Events they support,...

3.1.2.3 New... Assign appropriate predecessor and successor relationships between the Work Activities conducted on the same component, or in the same location but under differing Work Items, to ensure all related Work Activities across all Work Items are interdependently linked together.

3.1.2.5 New... The use of hard constraints is limited to contractually-defined Key Events and milestones. Each contractually-defined Key Event and Milestone will have a constraint assigned in order to lock their date to the current approved contractual date.

3.1.3 New... Schedule production work and preliminary inspections generating reports required by 2.1 or the Work Item, that could result in a change in work to be accomplished or additional material to be procured, to support reporting no later than the first 20 percent of the availability duration.

3.1.3.1 New... Schedule dry dock, or dry berth for Navy boats and craft, related inspections generating reports required by 2.1 or the Work Item to support reporting no later than the first 20 percent of the scheduled docking or dry berth period.

3.1.5 Added... and that no contractually-defined Key Event or Milestone date exceeds the date contractually authorized.

3.1.7.1 Added... All other reassignments of Milestone or Key Event relationships must be approved by the SUPERVISOR prior to implementation in the IPS.

3.1.7.2 Added... Activities ***projected to finish after*** their assigned Key Event or Milestone ***date, either by scheduling software-calculated date or by the accumulation of negative float***, must be identified and a mitigation plan must be developed. ***Mitigation measures should be formulated prior to the next weekly update of the IPS, but in no case exceed two weekly IPS update cycles.***



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3.1.7.3 New... When IPS logic projects attainment of each Milestone or Key Event after their planned completion dates, corrective action must be taken through resource allocation, rescheduling, or other means, to restore predicted Milestone or Key Event attainment within contractually authorized dates. Corrective action should be formulated prior to the next weekly update of the IPS, but must in no case exceed two weekly IPS update cycles. Where the attainment of a contractually-defined Key Event or Milestone cannot be recovered by means that are within the contractor's control, comply with the reporting requirements of 009-01 of 2.2.

Table One Added...(Bold and Italic)

<i>Planned Start</i>	The <i>planned</i> start date identified on the current IPS. (See <i>4.1.15</i>)
<i>Planned Finish</i>	The <i>planned</i> finish date identified on the current IPS. (See <i>4.1.15</i>)
Early Start	Software determined date (See <i>4.1.16</i>)
Early Finish	Software determined date (See <i>4.1.17</i>)
Late Start	Software determined date (See <i>4.1.18</i>)
Late Finish	Software determined date (See <i>4.1.19</i>)

3.3 Deleted... and the Controlling Work Items... Display Critical Path and Controlling Work Items at the Work Activity level to provide visual representation of the logic relationships between displayed Work Activities.

3.3.2 Added... Total Float

3.4 Added... Provide Schedule Analysis Reports. Deleted... Key Event and Milestone...

3.4.1 Added... Generate a Key Event and Milestone Analysis Report that includes the following information for each Key Event and ***contractually-defined*** Milestone: Event Type (***Key Event/Milestone***), Title, ***Work Activity Identifier***, Original Schedule Date, Revised Schedule Date, Actual Completion Date, ***Projected Finish Date, (inclusive of accounting for negative float)***, and ***analysis/actions***.

3.4.1.3 Deleted... Where the IPS logic predicts early attainment of a Key Event, or contractually-prescribed milestone, the contractor may continue to report the scheduled date according to the current contract.

3.4.2 New... Generate a Schedule Health Report that includes the following information: Number of incomplete activities with missing logic; Finish-to-Start Percentage; Number of incomplete activities with negative float; Number of incomplete activities with high duration; Weekly Throughput Percentage. Parameters exceeding threshold values require corrective action. (See Section 4, Notes, for report element description and threshold values)

3.5.1 Added... Develop a total manpower-loading curve ***depicting the forecasted manning required to execute the IPS***. Show ***scheduled*** manning throughout the contract period



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3.5.2 Added... scheduled..

3.5.3 Added... to accurately reflect the actual mandays expended in past weeks and any changes necessary in future weeks' manpower requirements to meet scheduled Milestones, Key Events and vessel delivery.

3.6.6 Deleted... Identify, at the weekly progress meeting, AIT, Government-Contracted Third Party Maintenance Provider, S/F, CIS, and FMA schedule progress information that has not been provided and has negative impact to the accuracy of the IPS.

Table 2... Added (Bold and Italic)

<i>Para. Number</i>	<i>Requirements</i>	<i>Title</i>	<i>Format</i>	<i>Due</i>
3.9.1	3.1 3.1.8 3.2 3.3 3.4	Initial IPS -Gantt chart -Spreadsheet -Critical Path (Gantt) -Critical Path Network (PDM) - <i>Schedule Analysis</i>	*.pdf *.xls *.pdf *.pdf *.doc	Based on contract type as listed in Table 3
3.9.2	3.1.4 3.1.8 3.2 3.3 3.4 3.5.1 3.5.2 3.6.2.1	Schedule of Record -Gantt chart -Spreadsheet -Critical Path (Gantt) -Critical Path Network (PDM) - <i>Schedule Analysis</i> -Manpower Curves (Total) -Manpower Curves (Trades) -Incomplete GFI	*.pdf *.xls *.pdf *.pdf *.doc *.xls *.xls *.doc	A-0
3.9.3	3.1.8 3.2.1 3.3.3 3.4 3.5.3 3.5.4 3.6.2.1 	Weekly IPS -Spreadsheet -Critical Path (Gantt) -Critical Path Network (PDM) - <i>Schedule Analysis</i> -Manpower Curves (Total/Trades) -Manpower Utilization Report -Incomplete GFI 	*.xls *.pdf *.pdf *.doc *.xls *.xls *.doc 	Weekly after A-0, 24 hrs prior to weekly progress meeting
3.9.4	3.1.6	25 Percent Conference Support -Gantt Chart (Most recent Revised Weekly IPS)	*.pdf	3 days prior to meeting
3.9.5	3.1.6	50 Percent Conference Support -Gantt Chart	*.pdf	3 days prior to meeting



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	3.8.4.1 3.8.4.2 3.8.4.3	(Most recent Revised Weekly IPS) -Machinery Reinstallation Plan -Valve Listing -Incomplete PCD Listing	*.xls *.xls *.xls	
3.9.6	3.1.6 3.8.5	75 Percent Conference Support -Gantt Chart (Most recent Revised Weekly IPS) -Underway test schedule	*.pdf *.xls	3 days prior to meeting

4.1.15 New...Planned Start or Planned Finish. The date identified in the IPS when the contractor plans to start or finish (respectively) the Work Activity. This may be established by a controlled schedule baseline (preferred method) or by manual entry into the scheduling software according to contractor policy/practice. Where a contractor uses a saved baseline schedule to establish Work Activity planned dates, the terms Baseline Start or Baseline Finish are considered interchangeable with Planned Start and Planned Finish.

4.1.26 New...Hard Constraint: A Mandatory Start or Finish date imposed on an activity, i.e. the activity becomes fixed to that date. Typically expressed as the activity Must Start On (MSO) or Must Finish On (MFO) the given date. Hard constraints prevent their associated activity from being logic-driven.

4.1.27 New...Schedule Health Report: A report inferring the reliability of the IPS in accurately predicting availability progression based on correct logic relationships, adequate work breakdown structure, and the completion of work. Schedule Health report elements include:

4.1.28 New...Activities with missing logic. Denotes incomplete activities without a predecessor or successor relationship to another activity. Threshold value is 2 activities of the total incomplete work activities in the IPS. Does not include Summary Activities.

4.1.29 New...Finish-to-Start Percentage. Denotes the preference for use of Finish-to-Start logic relationships between incomplete work activities in the IPS. Calculated by dividing the total number of Finish-to-Start logic links by the total number of all logic link types in the IPS. There is no threshold value; however, a Finish-to-Start percentage below 90% may require explanation by the contractor for other relationship types and their application.

4.1.29 Deleted...Activities with high (>60 days) positive float. Denotes incomplete activities which may have inadequate predecessor or successor ties established. Threshold value is 10 % of the total incomplete work activities in the IPS. Does not include Summary Activities.

4.1.30 New...Activities with negative float. Denotes the accumulation of incomplete activities projected to finish later than required to maintain the downstream schedule. Threshold value is 5%. Does not include Summary Activities.



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4.1.31 New...Activities with high (>60 days) duration. Denotes incomplete activities that may not be distributed into an effective Work Breakdown Structure. Threshold value is 5% of the total incomplete work activities in the IPS. Does not include Summary Activities or administrative and support activities planned for the duration of the availability.

4.1.32 New...Weekly Throughput Percentage. Denotes success in meeting scheduled activity completion on a weekly basis. Calculated by dividing the number of activities actually completed in the one-week period prior to the data date of the analysis by the number of activities required to complete in the same time period according to the planned schedule finish dates. Does not include Summary Activities, or GFI regarding work accomplished by AIT, Government-Contracted Third Party Maintenance Provider, S/F, CIS, and FMA. There is no threshold value, however, throughput below 80% should be evaluated to understand causal factors and potential impact to on-time availability completion.

4.1.32 Deleted... Baseline Execution Index...

4.1.33 New...Lags and Leads. Lags and Leads are scheduling functions used to represent a gap (Lag) or overlap (Lead) between activities. The use of Lags and Leads should be controlled to ensure they support an accurate and logical work flow. Improper and overuse of Lags and Leads can have a detrimental effect on a logic driven schedule and adversely affect float and the Critical Path. Typical examples where their use may be warranted include: insertion of time delay to represent report cycle time, staggering unrelated work item start dates, or drive work based on material receipt projection.

4.1.33.1 New...Lag: The delayed start of a successor activity and represents time that must pass before the second activity can begin.

4.1.33.2 New... Lead: The accelerated start of a successor activity where there is a finish to start relationship. The second activity can begin and be conducted in parallel with the first activity.

009-74 Occupational, Safety and Health Plan; accomplish

3.21 deleted course number and maintain re qualification requirement.

3.21.1 Deleted ... the OSHA outreach training program report as documentation of completing Course number 7615 until completion cards are received...and replaced with ... employees who have completed training required by 3.21.

4.5 New ... Cards that have an expiration date after April 1, 2019 are valid.

009-124 Thermal Spray Nonskid Application; accomplish (Re-Write) |

The update to 009-124 is substantial to include adding requirements for three new TSN repair processes. The new TSN processes range from small areas <20sqft prepared with hand tools and coated with hand held TSN spray wand to large areas >200sqft that are prepared with



Enclosure (1) NSI, 009-026, 009-60, 009-74 and 009-124 Summary of Change FY 21 CH-1 ultra-high-pressure waterjet cleaning and coated with robotic, four-head, TSN spray system. This TSN repair process is in support of FOD reduction from non-skid fragments/chips.

New attachments created to support each scope of repair.

The update includes nine government QA checkpoints. With the addition of new (V) checkpoints in support of color topping, and the elimination two (G) checkpoints.