OPNAV INSTRUCTION 4730.5R

From: Chief of Naval Operations

Subj: TRIALS AND MATERIAL INSPECTIONS OF SHIPS CONDUCTED BY THE BOARD OF INSPECTION AND SURVEY

Ref: (a) 10 U.S.C. §7304
(b) SECNAVINST 5040.3A
(c) OPNAVINST 5420.70F
(d) OPNAVINST 4730.7F
(e) OPNAVINST 4770.5G
(f) OPNAVINST 4700.8J
(g) OPNAVINST 4780.6E
(h) OPNAVINST 5090.1D
(i) OPNAVINST 5100.19E
(j) INSURVINST 4730.1G
(k) INSURVINST 4730.2G
(l) INSURVINST 4730.3A

1. Purpose. To set policy for trials and material inspections of U.S. naval vessels conducted by the Board of Inspection and Survey (INSURV). This instruction has been revised to include a change in grading criteria, change in material inspection periodicity, and change in the waiver process. This instruction is a complete revision and should be reviewed in its entirety.

2. Cancellation. OPNAVINST 4730.5Q.

3. Background. The inspections conducted by INSURV provide assurance to Congress, Secretary of the Navy (SECNAV), Chief of Naval Operations (CNO), fleet commanders, systems commanders (SYSCOM), type commanders (TYCOM), and commanding officers that mechanisms to identify, document, and resolve material deficiencies are adequate; that these processes are judiciously executed; and that they provide the commensurate level of effectiveness, efficiency, and material readiness. Reference (a) prescribes that examination of naval vessels be conducted by boards of naval officers to make recommendations to SECNAV as to which vessels, if any, should be stricken from the U.S. Naval Vessel Register. Per reference (b), this examination shall provide assurance to SECNAV, CNO, and fleets of an inspected
unit’s fitness for service; identify material conditions that limit mission capability; and report to SECNAV, CNO, fleet commanders, and TYCOMs the statistical information regarding material deficiencies. Additionally, reference (b) establishes inspection policy which promotes ascertaining an individual command’s self-assessment effectiveness. A skilled self-assessment capability promotes responsibility and accountability in each command. Accordingly, each inspection report should be used to evaluate the status of the command’s material readiness and its self-assessment effectiveness. As noted in reference (c), reports of the material inspection findings and recommendations shall be provided to the commanding officer and higher authority as appropriate in a timely, accurate, candid, and objective manner. Reference (d) provides guidelines for the periodicity of submarine material inspections. Reference (e) provides policy for material inspections of ships and service craft scheduled for inactivation and disposal. Reference (f) provides policy for conducting trials and inspections associated with construction and conversion of U.S. naval ships. This instruction is augmented by reference (g).

4. Responsibilities. SECNAV and CNO designate President, Board of Inspection and Survey (CNO N09P), as their agent to perform the following statutory, regulatory, and contractual requirements:

   a. Per references (b) and (c), develop and establish CNO policy and procedures for trials, material inspections, and surveys of ships and service craft consistent with law, regulations, and the terms of contracts.

   b. Per reference (a), examine naval vessels periodically by a board of naval officers to determine fitness for further service.

   c. Per references (b) and (c), conduct material inspections and surveys of ships and service craft to determine the material readiness of these vessels.

   d. Per references (c) and (f), provide independent verification of a newly constructed ship’s readiness for acceptance and delivery; and to determine if builder responsible equipment is operating satisfactorily during the guarantee period following acceptance.
e. Per references (b) and (c), and based on observations during INSURV assessments, provide timely, candid, and accurate findings to fleet commanders, TYCOMs, SYSCOMs, and appropriate SECNAV and office of the CNO, (OPNAV) offices, and higher authority, together with recommended actions where appropriate.

f. Per references (c), (h), and (i), conduct environmental protection and Naval Occupational Safety and Health oversight inspection of naval ships to include equipment, program compliance, and training.

g. Per references (b) and (c), compile statistical information and analyses on material deficiencies to provide the SECNAV, CNO, fleet commanders, SYSCOMs, and higher authorities such information as they may require.

5. Trial and Inspection Precepts and Procedures

a. A material inspection consists of a physical examination of the ship, its spaces, and installed equipment. It includes witnessing demonstrations of operating equipment and systems, and the examination of appropriate records. Furthermore, INSURV is responsible for identifying and reporting ship material conditions that substantially reduce a ship's fitness for naval service, and its ability to perform its primary and secondary missions and reach its expected service life. In so doing, INSURV shall perform independent, third party shipboard maintenance process audits validating reported material condition metrics. Additionally, based on audit findings:

(1) INSURV may recommend a ship's equipment (e.g., flight deck), systems, (e.g., oil pollution abatement) or programs (e.g., planned maintenance system (PMS)) be decertified, suspended or repaired before operated and request a remediation plan of actions and milestones (POA&M).

(2) INSURV may report maintenance processes (e.g., class maintenance plan) as ineffective (non-conforming) and request a remediation POA&M.

(3) INSURV may submit technical feedback reports to appropriate SYSCOMs.
b. The CNO and Commander, U.S. Fleet Forces Command should not issue procedural directives (precepts) for the conduct of individual trials and material inspections except where special considerations are indicated. Procedures for conducting routine trials and material inspections shall be specified by CNO N09P and can be found in references (j) through (l). Normally, trials and material inspections should contain an underway period. However, if a ship is unable to achieve minimum criteria for safely conducting underway operations within the designated inspection period, or if the ship is unable to conduct one or more of the underway demonstrations, the board shall:

(1) Complete the examination to the best of its ability.

(2) Identify those areas of the examination that were not completed and either request that the cognizant TYCOM (as applicable) conduct those parts of the material inspection not completed and report results to CNO N09P within 60 days of completion of the material inspection, or require that the delinquent events be re-inspected by the board at the earliest supportable date. For requests to the TYCOM to re-inspect, INSURV will provide assistance in completing this task if requested and if practicable.

c. Inspection results should be reported using the INSURV figure of merit (FOM):

(1) INSURV FOM is a single number representation of the ship’s overall material condition based solely on results of an individual INSURV event.

(2) INSURV FOM represents a ranking of the ship’s material condition relative to other ships. INSURV FOM does NOT represent an adjective grade such as “SAT-DEGRADED-UNSAT” score, nor can it be equated to one.

(3) INSURV FOM gives senior Navy leadership a useable tool to discern fleet material condition trends and distributed range of variance.

(4) However, if the material condition does not support most mission areas and appears to be beyond economical repair,
INSURV may deem the ship “unfit for further service”, and recommend to SECNAV that the ship be struck from the Naval Vessel Register.

d. To consolidate inspections and avoid redundancy, deficiencies identified during other major ship inspections and assessments, such as a Total Ship Readiness Assessment (TSRA), may be incorporated into the final INSURV inspection report if the assessment was conducted within 60 days of the scheduled material inspection or as negotiated between INSURV and the TYCOM. Although deficiencies generated during the assessment may become part of the final INSURV report, these deficiencies should be annotated as “corrected” where applicable, if practicable. The TYCOM shall document this linked event by message request to INSURV, cognizant regional maintenance centers, and the affected unit, nominally 4 months prior to the scheduled material inspection. INSURV should evaluate the request and determine the scope and applicability of linkage.

6. Policy. Ship material inspection intervals and “overdue” determination should be based on the following:

a. Active Commissioned Ships

(1) A ship’s INSURV material inspection should be scheduled per fleet scheduling guidance. If a ship is not inspected using the joint fleet maintenance manual scheduling guidelines, it shall be considered overdue. The maximum interval between INSURV material inspections is 7 years for submarines; 6 years for surface vessels and nuclear aircraft carriers; and 5 years for all other vessels unless specified in other instructions and shall not be exceeded without a waiver granted by the cognizant fleet commander with endorsement from CNO N09P. For submarines, this includes the 6-month post-availability requirement of reference (d). For any vessels not associated with a particular fleet commander, CNO N09P shall adjudicate the waiver request.

(2) If the INSURV inspection due date occurs during pre-overseas movement (POM) or deployment, the INSURV inspection shall be scheduled and conducted prior to POM and deployment. If a ship’s INSURV inspection due date falls within a CNO-scheduled maintenance availability, the inspection date should be adjusted to occur at least 4 months prior to the maintenance
period start date. Optimum use of fleet scheduling guidance should preclude overdue situations and waiver requests.

(3) If a material inspection is scheduled following completion of another major pre-deployment assessment (e.g., TSRA), the material inspection shall be separated from the end of the assessment by a minimum of 2 weeks.

b. Inactive Ships and Service Craft. Material inspections of inactive ships in Navy custody and ships or service craft scheduled for inactivation shall be conducted per reference (e).

c. Military Sealift Command (MSC) Ships. Applicable MSC ships shall be inspected per the current memorandum of understanding between CNO N09P and Commander, Military Sealift Command (COMSC). MSC ships should be inspected during each American Bureau of Shipping survey cycle. This should result in one inspection each maintenance cycle as prescribed by part 46, Code of Federal Regulations.

d. Oceanographic Research Ships (AGOR). AGORs are owned by the Office of Naval Research. Inspections of these vessels shall occur per reference (a). AGOR material inspections shall occur at least once every 5 years during the life of the vessel.

7. Nominations for Inspection

a. Active and New Construction Ships

(1) Cognizant TYCOM will propose inspection schedules for their ships to CNO N09P. Commander, Naval Research shall propose inspection schedules for AGORs. Ship inspections should be scheduled in an efficient and timely manner.

(2) A proposed disposition matrix of all naval vessels shall be submitted by Deputy, Shipbuilding Manager Warfare Integration Division (OPNAV (N9I)) to CNO N09P. All retention assets and vessels designed for foreign military sales (FMS) shall be reviewed by CNO N09P for material inspection and survey requirements. It is the responsibility of the cognizant TYCOM to propose a retention asset for a survey, and the responsibility of Commander, Naval Sea Systems Command
(COMNAVSEASYSCOM) Navy Inactive Ship Program (PMS 333) to propose an FMS asset for survey. These surveys shall be tailored per reference (e).

b. Inactive Ships. Proposals for inspections of inactive ships shall be submitted by COMNAVSEASYSCOM to CNO N09P. Inactive ships should be nominated to INSURV for an “open and inspect” type of inspection only when material conditions are not clearly known or whenever it appears warranted, as described in reference (e).

c. MSC Ships. The current memorandum of understanding between CNO N09P and COMSC shall be used to schedule MSC ships. Inspection schedules shall be forwarded to CNO N09P.

8. Material Discrepancies

a. Results of active and Naval Reserve Fleet ship inspections shall be appropriately documented using fleet and TYCOM maintenance directives.

b. CNO N09P shall ensure that reports of material inspections document any discrepancy trends noted for equipment, systems, or ship platforms. CNO N09P should make recommendations in INSURV’s annual report or via separate correspondence suggesting resolution of these deficiency trends.

c. The resolution of technical issues identified by CNO N09P should be per the established agreements between CNO N09P and COMNAVSEASYSCOM and other technical agent SYSCOMs.

d. Fleet commanders and COMSC should establish INSURV deficiency correction and follow-up procedures to ensure discrepancies are corrected in a timely manner.

9. Reclassification of Deficiencies. Deficiencies identified and documented by CNO N09P constitute a valid assessment of the material condition of that ship. Once a deficiency has been reported, it remains valid until resolved or superseded by the next material inspection of that ship. CNO N09P shall neither maintain a record of the status of all deficiencies nor cancel or downgrade documented deficiencies.
10. **Waivers**

   a. Requests for deviation from this instruction should be kept to a minimum. Reference (a) requires that all naval vessels be inspected every 3 years. While that periodicity may not be practicable, OPNAV has determined that the material inspections should occur no later than 6 years for surface ships and 7 years for submarines. In those rare circumstances where it has been determined that it is not possible to adhere to those material inspection intervals, waiver requests shall be considered by the cognizant fleet commander. For fleet vessels, the cognizant type commander shall forward the waiver request via naval message to CNO N09P. CNO N09P shall formally endorse the waiver and forward to the appropriate fleet commander for adjudication. Fleet commanders shall inform CNO N09P of their decisions. For non-fleet vessels, cognizant commanders shall forward waiver requests directly to CNO N09P for adjudication.

   b. Waiver requests shall include those compelling requirements that make it impractical to adhere to the INSURV material inspection intervals of subparagraph 10(a). A proposed alternate date for the inspection should be included.

11. **Action**

   a. INSURV inspecting teams shall make reports of material inspections, trials, and surveys to CNO N09P. CNO N09P shall review these reports and submit them to SECNAV and CNO with copies to appropriate commands.

   b. CNO N09P shall consolidate individual reports, analyze data, and deliver annual reports to Congress and Navy leadership noting trends and making recommendations to resolve pertinent issues.

   c. On a semi-annual basis, CNO N09P shall apprise the SECNAV, CNO, and cognizant commanders by message of active ships that are overdue for inspection.

12. **Records Management.** Records created as a result of this instruction, regardless of media and format, shall be managed per SECNAV Manual (M-) 5210.1 of January 2012.
13. Reports Control. The reporting requirements contained in this directive are exempt from reports control by SECNAV M-5214.1, subparagraph 7k, of December 2005.

JEFFREY A. HARLEY
Special Assistant for
Material Inspections and Surveys

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