

Navy Briefing Card
INSURV - Improving the Material Assessment of Ships
December 21, 2012

Background:

Effective January 1, 2013, the Navy will begin implementing changes to improve the rigor and effectiveness of the Board of Inspection and Survey (INSURV), the process for inspecting the material readiness of the fleet. This change is not the result of any specific incident, but rather a continuous review of processes and best practices. In recent years, the Navy has found areas where we can make improvements. The revisions will be implemented in five steps. The areas identified for improvement include how units are graded, the statistical evaluation of inspections, how units prepare for the inspection, and the frequency of when inspections occur.

Key Points:

- The Navy will implement five steps to revise the INSURV process. These steps are:
 1. Increasing the scope, breadth and rigor of the material inspection process to include the inspection of more assets and elements in greater detail than previous processes
 2. Doubling the frequency of material inspections so ships will be inspected approximately every 30 months rather than every 60 months
 3. Improving the final grading system from a SAT/UNSAT standard to a more descriptive INSURV Figure of Merit (IFOM), which will provide a more holistic view with improved opportunities for statistical evaluation
 4. More fully integrating the INSURV process with pre-deployment preparations to allow units to take INSURV inspections in stride, within existing maintenance budgets and without external assistance
 5. Provide better, more detailed inspection results to Congress, Navy leadership and external media
- These changes are intended to improve the rigor and effectiveness of the process for inspecting the material readiness of the fleet.
- INSURV inspections have evolved over time to reflect the complexity of the ships being inspected. This requires a similar evolution of our material inspection process, which works toward a standard of evaluation based on current readiness.
- The ever-increasing complexity of Navy ships requires more detailed explanations of evolutions and inspections to adequately inform type commands (TYCOM), Fleet commanders, the Chief of Naval Operations, Congress and all concerned of the evaluated unit's material condition status and capabilities.

Response to query:

Q1: What is the purpose of INSURV?

A1: INSURV's primary purpose is to fulfill Title 10 responsibilities to examine Naval Vessels and report findings to the Secretary of the Navy. Additionally, INSURV inspections are instrumental to the Fleet in providing a common Navy standard across all Fleets and TYCOMS, independently measuring the Fleet material conditions, acting as a material condition training event for crews, and working to inform and improve construction, maintenance, modernization, logistic and safety efforts.

Q2: Why are INSURV grading standards changing?

A2: The previously utilized grading status of SAT, DEGRADED or UNSAT oversimplifies inspection results with an insufficiently coarse descriptor of the unit's status. That's similar to giving the Scholastic Aptitude Test to high school seniors and giving them a single grade of SAT, DEGRADED or UNSAT.

The new system will use a more quantifiable INSURV Figure of Merit, which is a weighted average of 30 scores, to provide a final grade and report on the overall readiness of a ship.

Q3: What is the new grading system?

A3: The new grading system utilizes an INSURV Figure of Merit (IFOM) – a numerical score that is a weighted average of 30 Equipment Operating Capability (EOC) scores and evaluated demonstrations. The SAT/UNSAT method will be discontinued beginning January 1, 2013.

Q4: How is the scope and detail of the inspection process changing?

A4: Over the past two years, INSURV has coordinated with Fleet Commanders and TYCOMs to conduct a “bottom-up” review of the entire Material Inspection. That review has led to an expansion of the scope of the INSURV inspection, to include shooting all ship’s guns, inspecting more vessels (including LCUs, LCACs and small craft previously uninspected), expanded inspection of cyber, IT, IS assets, a broader evaluation of Ballistic Missile Defense systems, and an increased number of demonstrations required for evaluation. These standards have already been implemented.

Q5: How frequently were units inspected in the past?

A5: US Code Title 10 prescribes inspections every three years, if practicable. In 1998, then Chief of Naval Operations Adm. Jay Johnson established a periodicity of inspection at 60 months. In 2001, submarines were allowed to extend the INSURV inspection periodicity to 84 months. Currently, most ships, CVNs, and submarines are inspected at an interval of 60-65 months. Smaller, non-combatant vessels are inspected more frequently.

Q6: How does the Navy intend to change the inspection frequency schedule?

A6: Beginning in January of 2013, the Navy will begin to effectively double the frequency of material inspections of surface ships and CVNs, reducing the inspection interval from approximately 60 months to about 30 months. During each Fleet Readiness Plan (FRP) cycle, INSURV will conduct a traditional Material Inspection. In the alternating cycle, a similar inspection will be conducted by the TYCOM, with INSURV support.

Q7: How do you intend to maintain continuity between the TYCOM inspections and INSURV inspections?

A7: To ensure continuity between INSURV and TYCOM inspections, the TYCOM inspections will be conducted by 24-member teams made up of an equal number of TYCOM and INSURV inspectors. Results of TYCOM inspections will be kept within the Fleet and provided to INSURV for reference during subsequent inspections. INSURV inspection results will continue to be reported to Congress.

Q8: When was the INSURV process established?

A8: In 1882 Congress passed a law requiring the Navy to establish a “board of officers” to inspect all Navy ships “every 3 years, if practicable” and to report the results to the Secretary of the Navy and Congress. The Navy established this group as the Board of Inspection and Survey. This law remains in effect today (USC Title 10, Section 7304).

Q9: How has the INSURV grading process been structured in the past?

A9: In 1882 the newly established inspection board categorized ships simply as “fit or unfit” for further service. From 2000 to 2006, the board determined an Equipment Operating Capability (EOC) score for each of approximately 20 functional areas, such as main propulsion, navigation, combat systems, weapons, deck, etc. No final grades were assigned, but if a ship could not get underway to conduct the inspection, she was considered UNSAT. From 2007 to 2009, in addition to the EOC scores, INSURV provided one of three final grades – FIT, DEGRADED or UNFIT – for “sustained combat operations.” In

2010, INSURV's final grade terminology was changed to SAT, DEGRADED or UNSAT material condition.

Q10: How have ships managed INSURV inspections in the past?

A10: Due to the training cycles for surface ships and carriers, INSURV inspections have historically required external assistance and additional time to prepare for the rigors of an INSURV inspection. The new INSURV process advocates preparation for INSURV inspections to become more fully integrated into the deployment preparation process.

Q11: How is the INSURV process being integrated with pre-deployment preparations?

A11: "Come as you are" is a goal as part of the revised process. It means that rather than prepare for an INSURV, ships will prepare for deployment, and the INSURV process will measure their material condition as a part of that process. The Navy is evaluating the degree of difference between pre-deployment preparations for INSURV and non-INSURV deployment preparations to create a program that will allow units to take INSURV inspections in stride, within existing maintenance budgets and without external assistance. While this program will take time to fully implement, it will eventually better measure the unvarnished readiness of the fleet.

Q12: When are these INSURV changes taking place?

A12: Changes to the scope, breadth and rigor of the INSURV process have already been fully implemented. The new inspection schedule and grading system will take effect January 2013. Integrating the INSURV process and pre-deployment preparations will be a continuing process over the next few years to ensure the best program to prepare our ships to meet all the challenges and demands of our constantly changing world.

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