



# Acquisition Directorate

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## Program Executive Officer

**National Security Cutter  
BERTHOLF Preliminary Acceptance**



# Overview

- **Preliminary Acceptance Process**
  - NSC Pre-Delivery Trials
  - Trial Card Comparison
  - Addressing Trial Cards
- **Starred Card Status**
- **Preliminary Acceptance (DD-250)**
- **Expectations Following DD-250 & Path to Final Acceptance**
- **TEMPEST Certification Process**



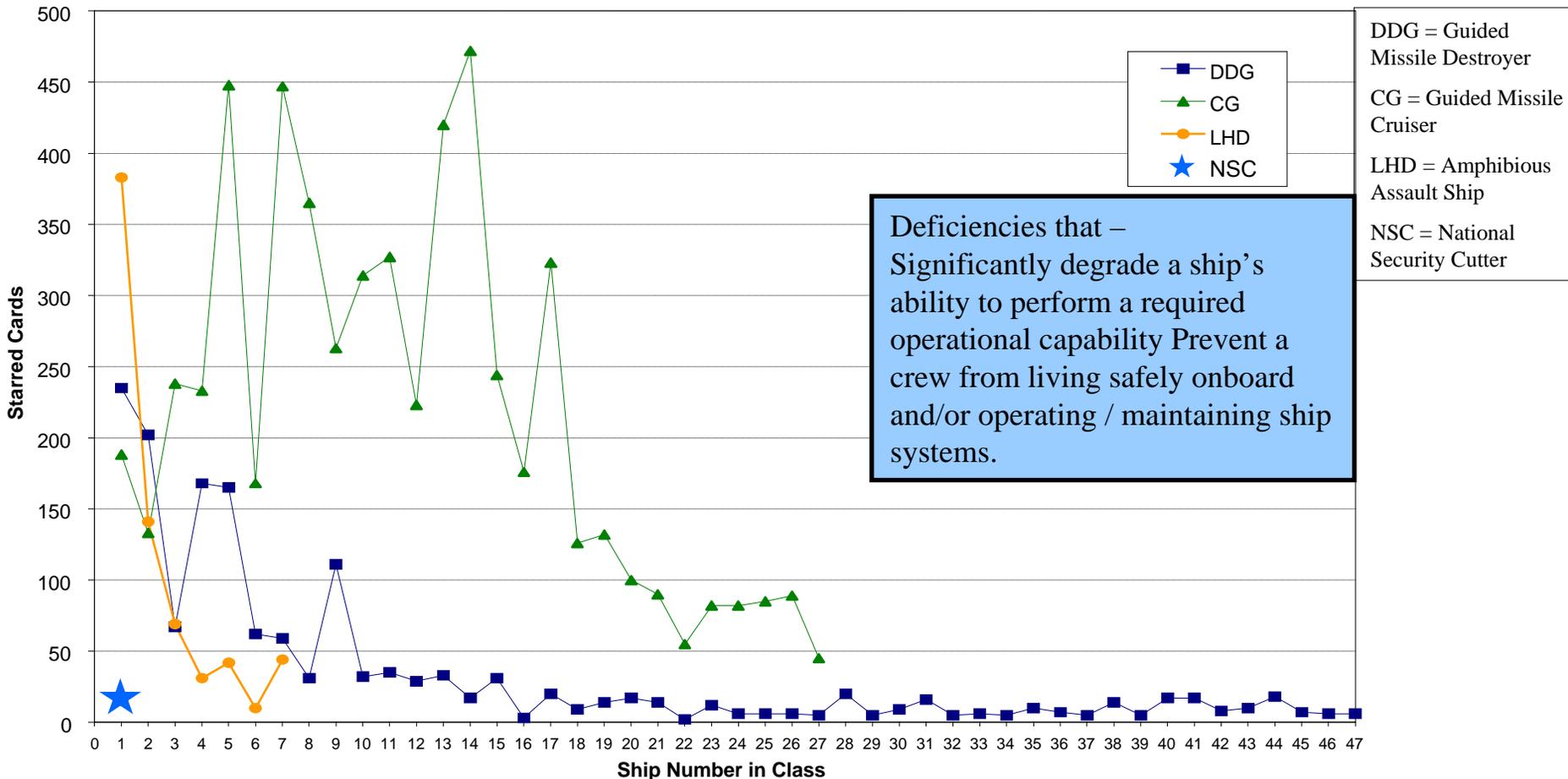
# Preliminary Acceptance Process: NSC Pre-Delivery Trials

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- ✓ **4 – 11 Dec 2007**      **Machinery Trials**  
Objective: Shipbuilder demonstration of machinery plant capabilities to Coast Guard.
- ✓ **8 – 11 Feb 2008**      **Builder's Trials**  
Objective: Shipbuilder demonstration of the ship's capabilities and 'Dress Rehearsal' for Acceptance Trials.
- ✓ **26 – 27 Mar 2008**      **Builders' Boat Handling Trials**  
Objective: Shipbuilder demonstration of stern launch and recovery operations for Long Ranger Interceptor and Short Range Prosecutor.
- ✓ **7 – 11 Apr 2008**      **Acceptance Trials**  
Objective: Evaluation by INSURV of ship's capabilities to meet contractual requirements.

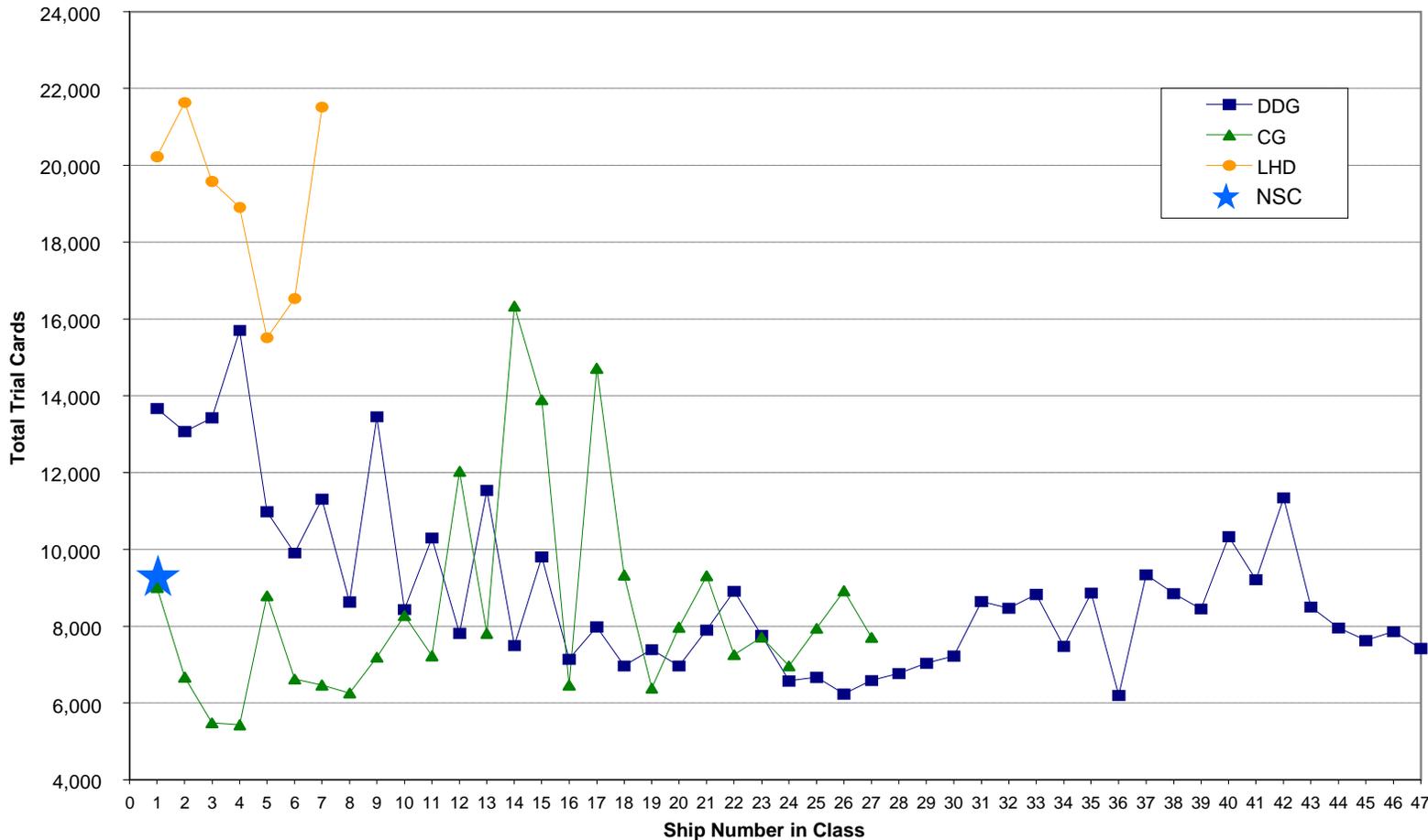


# Acceptance Process: Starred Card Comparison of Select U.S. Navy Vessels



In comparison, the U.S. Navy’s first ship in its DDG class had slightly fewer than 250 starred cards.

# Acceptance Process: Total Trial Card Comparison of Select U.S. Navy Vessels



DDG = Guided Missile Destroyer  
 CG = Guided Missile Cruiser  
 LHD = Amphibious Assault Ship  
 NSC = National Security Cutter

In comparison, the U.S. Navy's first ship in its DDG class had slightly fewer than 14,000 outstanding trial cards at acceptance.

# Preliminary Acceptance Process: Addressing Trial Cards

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- Following each trial period (Machinery Trials, Builder's Trials, Acceptance Trials), the Coast Guard convened a trial card screening conference to assign responsibility for each card to the contractor or the government.
- Before preliminary acceptance (DD-250), the Coast Guard worked closely with the contractor to ensure that each trial card was either resolved prior to delivery, or documented for resolution post-acceptance.
- Any trial cards not resolved by preliminary acceptance have been documented on the DD-250. These cards will continue to be tracked by the Coast Guard until resolved.

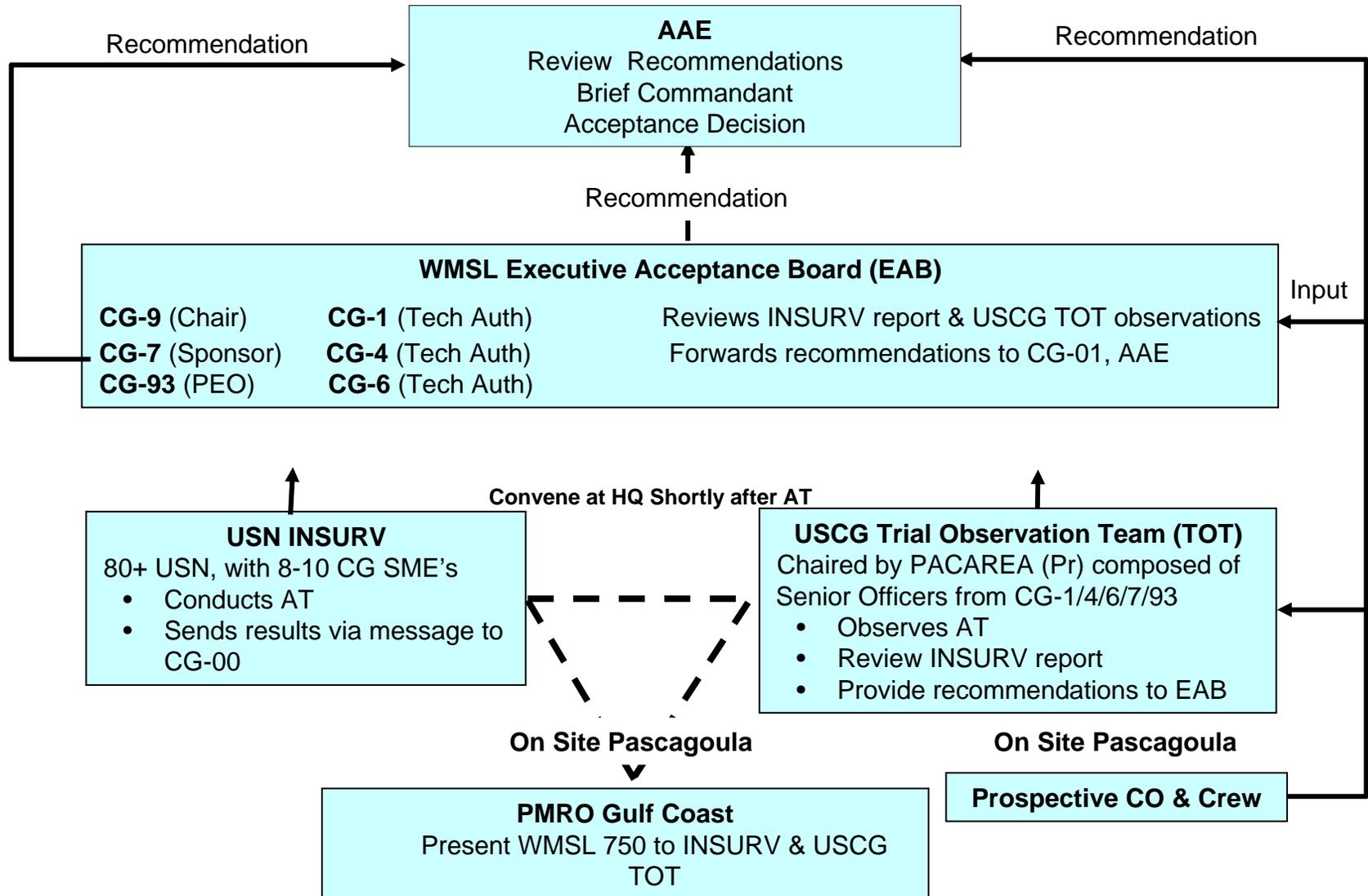


# Status of INSURV's Starred Cards

Description	Status
1. Machinery Control and Monitoring System: MCMS unstable, operated in casualty mode for trials.	MCMS network and MTU network function well independently of one another. Communications issues have been identified between the two systems. Bridging, or "middleware" software has been identified as the source of the issues and is being replaced to provide MTU to MCMS-required communications capabilities. The new software is scheduled for installation on BERTHOLF on 9 May followed by regression testing for the next 7-14 days. <b>Estimated completion date: 24 May 2008</b>
2. Line Shaft Bearings: Lube oil leads, fresh water contamination & scoring	Housings have been realigned and new chocks are being fitted to lock in the alignment. New seals for the bearings are at the shipyard to be installed when all housing alignment work is complete. Dockside and full power sea trials will be required to verify repairs and close trial card. <b>Estimated completion date (pending underway tests): 12 May 2008</b>
3. Stbd Anchor: Brake mis-adjusted & grease points under-lubricated.	The brake has been properly adjusted and all lubrication points have been lubricated. An at-sea demo is required to verify free fall capability. <b>Work complete (pending underway tests)</b>
4. Mooring capstan : 4 controllers placed operators in snapback danger zone.	The contractor has ordered controllers with umbilical cords to enable the operators to operate the equipment from various locations. Two of the systems have been installed and tested. Awaiting receipt of parts and installation for the remaining two systems. <b>Estimated completion date: 16 May 2008</b>
5. Gantry crane hoists improperly rigged	All wire rope hoisting cables have been changed out with cables of proper lay and material. Load testing will be conducted when line shaft bearing repairs are complete. <b>Work complete (pending weight test)</b>
6. Magazine loading platform: Unsafe to operate under load.	The design engineer personally inspected the system and identified changes. Changes have been completed and the system tested satisfactorily. <b>COMPLETE</b>
7. Incinerator: Incinerator was inoperable.	Burner parts have been replaced. Operational tests and manometer readings (back pressure measurements) have been conducted. <b>COMPLETE</b>
8. Aviation certification	Issues have been addressed. Anticipate receiving interim certification prior to sail away. Plans have been developed to support full certification by FOC. Final tests pend completion of line shaft bearing alignment. <b>Estimated completion date: 11 May 2008</b>

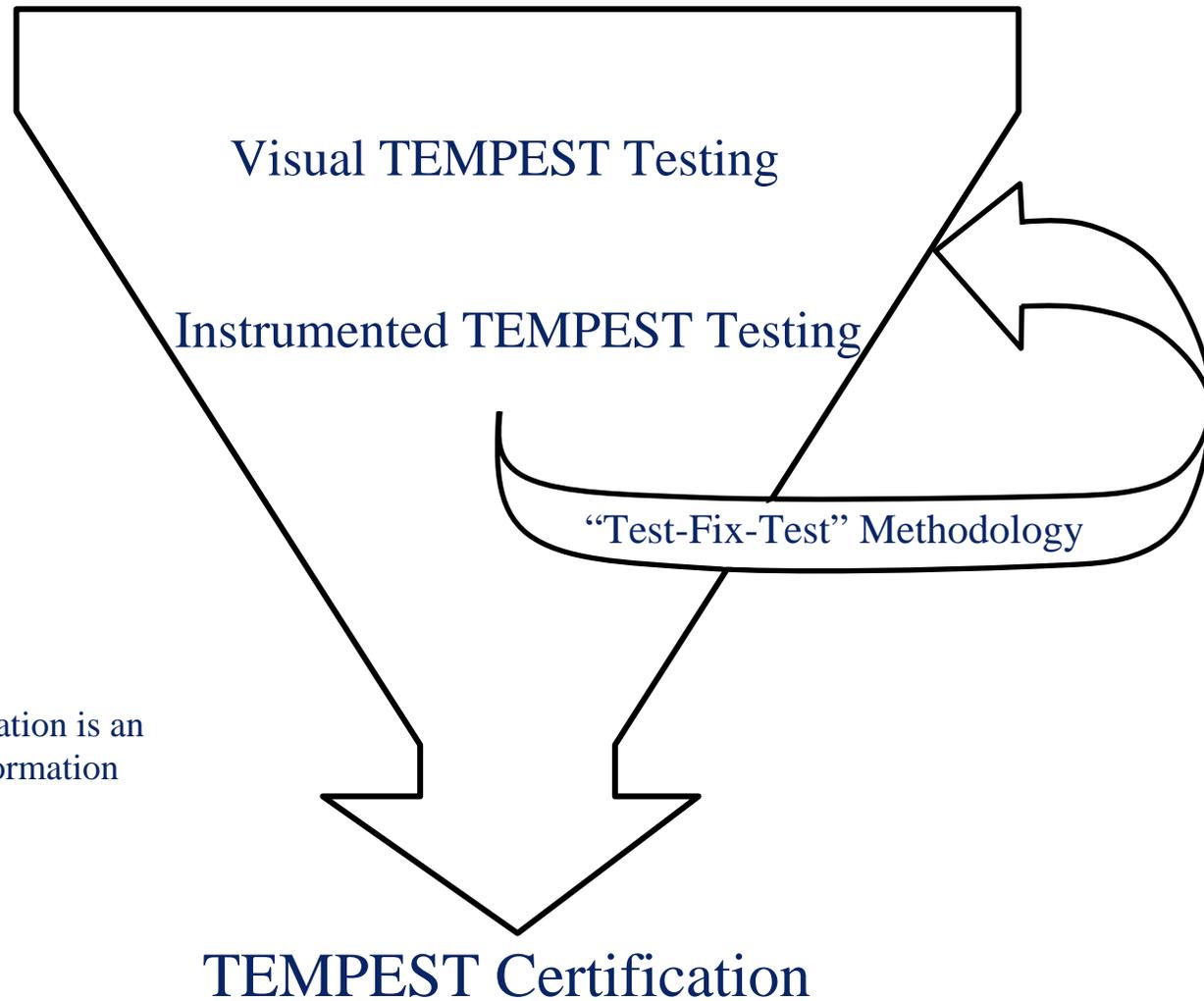


# Preliminary Acceptance (DD-250) – Decision Diagram





# TEMPEST Certification Process



Note: TEMPEST certification is an important element of Information Assurance



# Post-DD250 Expectations & Path to Final Acceptance

- Now that preliminary acceptance is completed, BERTHOLF is now in “In Commission Special” status and begins approximately 22 month period of routine post-delivery availability, test & evaluation, post shakedown availability, and at-sea crew training for deployment.
- During this post-delivery period, all remaining contract liens documented in the DD-250 (preliminary acceptance) will be resolved.
- Following successful completion of warranty period (one year), and the resolution of outstanding contract liens, the Coast Guard will execute final acceptance of the cutter.



By comparison, the first U.S. Navy DDG Guided Missile Destroyer underwent a post-delivery period of 24 months for routine testing, evaluation and Post Delivery and Post Shakedown availabilities, crew training prior to deployment.

# NSC #1 Pre And Post Delivery Test & Trials Timeline

