

---

**DISTRIBUTION STATEMENT D:**

Distribution authorized to DOD components and DOD contractors only; Critical Technology; October 2007. Other requests for this document shall be referred to Naval Sea Systems Command (SEA 04RM). Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

---

**Date:** October 2007      **MIP** 1102      **MRC:** A7 A5A1 N      **Periodicity:** AP-1  
**Series:**

---

**Location:**

---

**Ship System:** Hull Structure 100  
**System:** Shell and Supporting Structure 110  
**SubSystem:** Hull Structure 1102  
**Equipment:** Bow Structure

---

<b>Rates</b>	<b>Man- Hours</b>	<b>Rates</b>	<b>Man- Hours</b>	<b>Rates</b>	<b>Man- Hours</b>
Assessor	4.0				
<b>Total Man- Hours:</b>	4.0	<b>Elapsed Time:</b>	4.0		

---

**MAINTENANCE REQUIREMENT DESCRIPTION**

1. [Inspect Bow Structure.](#)
- 

**SAFETY PRECAUTIONS**

1. Forces afloat comply with NAVOSH Program Manual for Forces Afloat, OPNAVINST 5100.19 series.
- 

**TOOLS, PARTS, MATERIALS, TEST EQUIPMENT****MATERIALS**

1. [01609] Magnifier
2. [03187] Ruler, nonmetallic

**TOOLS**

1. [00611] Hammer, hand, Scaling, 1 LB
2. [01161] Scraper, ship, Type 1, carbon steel, angle bent end
3. [02271] Flashlight, Type 3, style 1, explosive proof
4. [12656] Tape, measuring, 25'

**NOTE:** Numbers in brackets can be referenced to Standard PMS Materials Identification Guide (SPMIG) for identification.

---

**PROCEDURE****1. Inspect Bow Structure.**

**NOTE 1 :** Material Condition Assessment Teams accomplish Maintenance Requirement Card following ship's operation in sea state five and above.

**NOTE 2 :** Inspectors should look for structural damage in the form of cracked welds and twisted and bent tee stiffeners with webs and flanges deflected on structural members which are visible without removing lagging and other interference. Cracks should be repaired as soon as possible.

- a. Inspect the following focus areas for buckled and cracked structural members visible without removing lagging and other interferences. If wavy or peeling lagging is found, or if damage is suspected behind lagging, remove lagging and inspect structure.
  - (1) SONAR EQUIPMENT ROOM3 (3-18-0-Q).
    - (a) Shell transverse FR 26 and FR 34 port and stbd.
    - (b) Overhead (first plat) deck transverse FR 26 and FR 34.
    - (c) Deck FR 18-42 including coaming of WTH 3-40-1.
    - (d) Shell longitudinals 15, 16, and 17 port and stbd.
    - (e) Athwartships bulkhead next to WTD 3-38-1.
    - (f) Shell intercoastals port and stbd.
  - (2) SONAR PASSAGE (4-22-0-L).
    - (a) Shell transverse FR 26 and FR 34 port and stbd.
    - (b) Overhead (second plat) deck transverse FR 26 and FR 34.
    - (c) Shell longitudinals 12, 13, and 14 port and stbd.

- (3) Provide results with location measured in inches from deck or overhead, and from centerline with indication to port or stbd, as well as frame.
- (4) Provide date, type, and repairing activity (i.e., specific shipyard, ship's force, etc.) of any structural repairs in the SONAR equipment room 3 area and SONAR passageway area as a result of previous efforts such as the 2003 inspections.
- (5) Complete the report forms as in Tables 1, 2, and 3 (additional sheets may be required). Include as much detail, including sketches and photographs, as possible. Forward completed forms to: COMMANDER, ATTN: 05P21, NAVAL SEA SYSTEMS COMMAND, 1331 ISAAC HULL AVE SE, WASHINGTON NAVY YARD DC 20376-5141.

**NOTE 3 :** If damage is found in step 1.a, conduct a more extensive visual inspection including removal of deck and shell lagging to the extent practicable. Recommend leaving areas of damage uncovered, in the interest of follow-on inspection by RMC or other activity in development of repair specifications. Report results of ships with and without damage by naval messages to appropriate RMC, TYCOM, PEO Ships Washington DC, SHIPS-FT, and COMNAVSEASYS COM Washington DC 05P21 and 05N.

- b. Inspect shell and deck structure in the following spaces if accessible:
- (1) SONAR EQUIPMENT ROOM 2 (2-18-0-Q): Inspect shell transverse FR 26 and FR 34 port and stbd, and overhead (Main Deck) deck transverse FR 26 and FR 34..
  - (2) CHAIN LOCKER (3-6-2-Q): Inspect breast hook NR 7, first plat, and BH No. 9 between FR 6 and FR 18.
  - (3) 5 in 54 cal PROJ MAG (3-42-0-M): Inspect shell transverse FR 50 and FR 58 port and stbd.
  - (4) SONAR COOLING EQUIPMENT ROOM 4 (4-42-0-Q): Inspect shell transverse FR 50 and FR 58 port and stbd.
  - (5) SONAR Dome access trunk (5-28-0-T): Inspect web of breast hook (BH) No. 1 and BH No. 2 between FR 28 and FR 34. If damage is found, inspect BH No. 1 and 2 (shell longitudinals between FR 18 and FR 28 in cable trunk (5-2-0-Q)).
  - (6) Provide results with location measured in inches from deck or overhead, and from centerline with indication to port or stbd, as well as frame.
  - (7) Provide date, type, and repairing activity (i.e., specific shipyard, ship's force, etc.) of any structural repairs.
  - (8) Complete the report forms as in Tables 1, 2, and 3 (additional sheets may be required). Include as much detail, including sketches and photographs, as possible. Forward completed forms to: COMMANDER, ATTN: 05P21, NAVAL SEA SYSTEMS COMMAND, 1331 ISAAC HULL AVE SE, WASHINGTON NAVY YARD DC 20376-5141.

**NOTE 4 :** If damage is found in step 1.b, conduct a more extensive visual inspection including removal of deck and shell lagging to the extent practicable. Recommend leaving areas of damage uncovered, in the interest of follow-on inspection by RMC or other activity in development of repair specifications. Report results by naval messages to appropriate RMC, TYCOM, PEO Ships Washington DC, SHIPS-FT, and COMNAVSEASYS COM Washington DC 05P21 and 05N.

HULL NO.	WORK CENTER	MM/DD/YY	SHEET 1 OF 3
<b>SONAR EQUIPMENT RM 3 (3-18-0-Q)</b>		<b>INSPECTED (Y/N)</b>	<b>FINDINGS SEE STEP 1.b.(6)</b>
SHELL TRANSVERSE FR 26 AND FR 34 PORT AND STBD.			
OVERHEAD (FIRST PLAT) DECK TRANSVERSE FR 26 AND FR 34.			

HULL NO.	WORK CENTER		MM/DD/YY	SHEET 1 OF 3
DECK FR 18-42 INCLUDING COAMING OF WTH 3-40-1.				
SHELL LONGITUDINALS 15, 16, AND 17 PORT AND STBD.				
ATHWARTSHIPS BULKHEAD NEXT TO WTD 3-38-1.				
SHELL INTERCOSTALS PORT AND STBD.				

**Table 1**

HULL NO.	WORK CENTER		MM/DD/YY	SHEET 2 OF 3
<b>SONAR PASSAGE (4-22-0-L)</b>		<b>INSPECTED (Y/N)</b>	<b>FINDINGS SEE STEP 1.b.(6)</b>	
SHELL TRANSVERSE FR 26 AND FR 34 PORT AND STBD.				
OVERHEAD (SECOND PLAT) DECK TRANSVERSE FR 26 AND FR 34.				

HULL NO.	WORK CENTER		MM/DD/YY	SHEET 2 OF 3
SHELL LONGITUDINALS 12, 13, AND 14 PORT AND STBD.				
<b>SONAR EQUIPMENT RM 2</b> <b>(2-18-0-Q)</b>				
SHELL TRANSVERSE FR 26 AND FR 34 PORT AND STBD.				
OVERHEAD (MAIN DECK) DECK TRANSVERSE FR 26 AND FR 34				
<b>CHAIN LOCKER</b> <b>(3-6-2-Q)</b>				
BREAST HOOK NR 7, FIRST PLAT, AND BH NO. 9 BETWEEN FR 6 AND FR 18.				

**Table 2**

HULL NO.	WORK CENTER		MM/DD/YY	SHEET 3 OF 3
<b>5 IN 54 CAL PROJ MAG</b> <b>(3-42-0-M)</b>				
		INSPECTED (Y/N)	FINDINGS SEE STEP 1.b.(6)	
SHELL TRANSVERSE FR 50 AND FR 58 PORT AND STBD.				
<b>SONAR COOLING EQUIPMENT RM 4</b> <b>(4-42-0-Q)</b>				

HULL NO. SHELL TRANSVERSE FR 50 AND FR 58 PORT AND STBD.	WORK CENTER		MM/DD/YY	SHEET 3 OF 3
<b>SONAR DOME ACCESS TRUNK</b> <b>(5-28-0-T)</b>				
WEB OF BREAST HOOK (BH) NO. 1 AND BH NO. 2, FR 28 - FR 34.				
<b>CABLE TRUNK</b> <b>(5-2-0-Q)</b>				
BH NO. 1 AND 2 (SHELL LOGITUDINALS BETWEEN FR 18 - FR 28				

**Table 3**