

1	SEQUENCE NO	T12
2	DATA DESC	Test Reports, High Impact Shock
3	SUBTITLE	
4	DID NUMBER	T12A dated 8/17/01
5	CONTRACT REF	Purchase Order
6	TECH OFFICE	Follow Shipbuilder
7	DD 250 REQ'D	
8	APPRVL CODE	A
9	IAC INPUT	
10	FREQUENCY	
11	AS OF DATE	
12	DATE 1ST SUBM	30 DATC
13	DATE SUB SUBM	14 DARC
14	DISTRIBUTION	FSB 6/0 BIW(LYS) 1/0
15	TOTAL	7/0
16	REMARKS	

DATA ITEM DESCRIPTION	2. Identification	
	Agency	Number
1. Title TEST REPORTS, HIGH IMPACT SHOCK	BIW/LYS (DDG)	T12A
3. Description or Purpose Provides results of equipment shock tests and post shock test inspection and functional tests, to confirm compliance with shock requirements for Grade A and Grade B Equipment.	4. Approval Date 8/17/01	
	5. Office of Primary Responsibility BIW D-40NSV	
	6.	
7. Application or Interrelationships Applies whenever shock testing of equipment is used as a basis of qualification for Grade A or Grade B items.	8.	
	9. References (Mandatory as cited in Block 10) MIL-S-901 as Modified by Appendix S	
10. Preparation Instructions		
10.1 <u>General</u> Shock test reports shall contain the following sections:		
<ul style="list-style-type: none"> a. <u>Section 1 - Test Installation and Conduct</u> This section describes the test installation, conduct, and results of the test, including the applicable information of 10.2. This section shall also include: <ul style="list-style-type: none"> (1) Description of material, size, and type of hold-down bolts (and of any other hold down or locating devices) used to secure or locate the tested items to their foundations or test fixtures during shock tests. (2) Clear photographs of each equipment mounting configuration used during the shock test. (3) A drawing of the fixture. Modifications to standard fixtures may be submitted as mark-up drawings. (4) If shock test instrumentation is employed, a description of such instrumentation and a clear copy of data recorded during the test shall be submitted with the report. (5) Reference to the applicable equipment military specifications or acquisition document including the applicable revision and date of issue shall be submitted with the report. b. <u>Section 2 - Post-Test Inspection</u> This section describes the conduct and results of the post-test inspection including the applicable information of 10.2. 		
10.2 <u>Specific Requirement</u> Each piece of equipment to be tested shall be identified with the information delineated in 10.2.5. Test shall be numbered and dated.		
10.2.1 <u>Lightweight Shock Machine Test</u> The following information shall be included for all lightweight shock machine tests as defined by MIL-S-901.		
<ul style="list-style-type: none"> a. Type of test fixture as defined by MIL-S-901 <ul style="list-style-type: none"> (1) If using Type 4C indicate the mounting platform. (2) If using Type 6E indicate panel number. (3) If not standard provide photographs. b. Total weight on anvil plate c. Instrumentation <ul style="list-style-type: none"> (1) Gauge type 		

- (2) Location
- (3) Orientation
- (4) Results
- d. Monitored performance. See Table I for a sample tabulation format for required information.
 - (1) Blow number
 - (2) Drop, feet
 - (3) Axis
 - (4) Operating mode
 - (5) Reference measurements
 - (6) Post-test measurements or corrections
- e. Survey findings noting any damage and providing damage photographs.
- f. Modifications, if any, accomplished prior to or during test with applicable rationale, description, etc.
- g. If witnessed by a designated Government representative, the report shall include signature of witness and certification of test report.
- h. Certification of report by the test laboratory.
- i. Remarks

TABLE III HEAVY WEIGHT SHOCK MACHINE TEST MONITORED PERFORMANCE

Shot No	Range		Operating mode (on, off, open Reference ¹ closed, etc.) measurements	Post test measurements ¹ or conditions ²
	FSP	LFSP		
1	40	110		
2	30	80		
3	25	65		
4	20	50		

- 1/ Volts, amperes, revolutions per minute, pounds per square inch, alignment, clearances, bolting torques, etc.
- 2/ Yielding, cracking, short-circuiting, separating, unlatching, unbalanced, etc.

10.2.4 Post-Shock Test - Testing and Inspection The following information shall be included for all tests:

- a. Identification of item being inspected through the use of such information as component name, manufacturer, and drawing number.
- b. Type of shock test performed:
 - (1) Machine
 - (2) Platform
- c. Inspection and functional tests. Type of test accomplished and approval by the appropriate inspectors.
- d. Repairs which were necessary during tests.
- e. Condition of item being tested/inspected.
 - (1) Breakage
 - (2) Deformation
 - (3) Misalignment
 - (4) Unbalance
 - (5) Yielding
 - (6) Cracks
 - (7) Momentary malfunction
- f. Disposition of unit
- g. Signature certifying the report as correct.

- (1) Test laboratory
- (2) Contractor
- (3) Government representative

10.2.5 Equipment Identification and Test Installation Requirements The following information shall be included for all tests:

- a. Item
 - (1) Name
 - (2) Type
 - (3) Nomenclature
 - (4) Rating
 - (5) Service
 - (6) Military specification and technical manual number
- b. Manufacturer (name and address)
- c. Model number and serial number
- d. Size or capacity (if applicable)
- e. Plan number (sectional assembly and outline: revision and date)
- f. Approximate overall size of equipment
 - (1) Length
 - (2) Height
 - (3) Width
 - (4) Diameter
- g. Weight (wet, dry and total weight including test fixture, wet and dry)
- h. Height of center-of-gravity above base of equipment
- i. Contract or purchase order number
- j. Requirements of MIL-S-901:
 - (1) Test category
 - (2) Grade
 - (3) Equipment class
 - (4) Shock test type
 - (5) Mounting location
- k. Mounting aboard ship represented during shock test
 - (1) Plane
 - (2) Orientation
- l. Hold-down fasteners or locating devices used for attachment of items to their foundation or test fixture during shock tests
 - (1) Grade
 - (2) Size
 - (3) Material
 - (4) Specification
- m. Hold down bolt torque
- n. Description of resilient mounts, if used
 - (1) Size
 - (2) Type
 - (3) Location
 - (4) Specification
- o. Major components and attached items in test
- p. Test laboratory and address

10.3 Format Requirements The shock test report shall be typed in the Supplier's format on 8-1/2" x 11" sheets (metric size A4).