

S2110  
Revision Level C003  
Revision Date September 11, 2007  
SHOCK TEST AND POST TEST REPORTS

**S2110 SHOCK REPORT**

FORWARD DELIVERABLES HEREIN TO:

NORTHROP GRUMMAN NEWPORT NEWS  
4101 WASHINGTON AVENUE  
NEWPORT NEWS, VA 23607  
ATTN: E45 SOFTWARE COORDINATOR  
BLDG. 635-6

THIS ITEM REQUIRES HIGH IMPACT SHOCK QUALIFICATION IN ACCORDANCE WITH MIL-S-901D AND PROCUREMENT APPENDIX L. THE SUPPLIER IS REQUIRED TO NOTIFY THE NORTHROP GRUMMAN NEWPORT NEWS SOURCING REPRESENTATIVE WITHIN THEIR QUOTE OR NO LATER THAN (1) MONTH OF PLACEMENT OF THIS PURCHASE ORDER IF A REQUEST FOR QUOTE IS NOT GENERATED, WHICH OF THE FOLLOWING MEANS WILL BE USED TO SHOCK-QUALIFY THIS ITEM:

- A. TESTING
- B. EXTENSION REQUEST
- C. CALCULATION/ANALYSIS
- D. SUBMIT EVIDENCE OF PREVIOUS SHOCK QUALIFICATION APPROVAL FOR THIS ITEM

A. IF SHOCK TESTING WILL BE USED TO QUALIFY THIS ITEM:

1. (7) COPIES OF THE SHOCK TEST REPORT AND POST SHOCK TEST INSPECTION AND FUNCTIONAL TESTING REPORT **IS REQUIRED** FOR EACH TEST PERFORMED IN ACCORDANCE WITH APPENDIX L. **THE SHOCK TEST REPORT AND POST SHOCK TEST REPORT SHALL INCLUDE ALL REQUIRED INFORMATION SPECIFIED IN MIL-S-901D. A SHOCK TEST REPORT TEMPLATE FOR LIGHTWEIGHT AND MEDIUM WEIGHT SHOCK TESTS CAN BE ACCESSED VIA THE NGNN/O51 SOURCING WEB SITE.** THE PURCHASE ORDER NUMBER, ITEM NUMBER AND VENDOR'S DRAWING NUMBER, IF APPLICABLE, SHALL BE INDICATED ON THE REPORTS. REPORTS FOR APPROVAL MUST BE RECEIVED BY THE PURCHASER WITHIN (1) MONTH AFTER COMPLETION OF THE SHOCK TEST.
2. CLEAR PHOTOGRAPHS OF THE TEST SETUP AND EACH INSTANCE OF DAMAGE MUST ACCOMPANY EACH SHOCK TEST REPORT.
3. ONLY STANDARD TEST FIXTURES SHOWN IN MIL-S-901D OR NON-STANDARD FIXTURES APPROVED BY THE NAVY WILL BE ACCEPTED FOR THE SHOCK TEST.
4. CERTIFICATION OF THE **SHOCK TEST REPORT FOR LIGHTWEIGHT AND MEDIUM WEIGHT SHOCK TESTS** SHALL BE BY THE FACILITY PERFORMING THE SHOCK TEST. CERTIFICATION OF SHOCK TEST REPORT FOR ALL **HEAVY WEIGHT TESTS** SHALL BE BY THE

GOVERNMENT REPRESENTATIVE.

5. CERTIFICATION OF THE POST SHOCK TEST INSPECTION AND FUNCTIONAL TESTING REPORT BY THE GOVERNMENT REPRESENTATIVE IS REQUIRED FOR TESTED COMPONENTS OF ALL WEIGHT CLASSES.
6. UNLESS A DCMA (FORMERLY DCMC OR DCAS) EXEMPTION CODE IS LISTED ON PAGE (1) OF THIS PURCHASE ORDER, GOVERNMENT PROCUREMENT QUALITY ASSURANCE (GPQA) ACTION IS REQUIRED PRIOR TO SHIPMENT FROM YOUR PLANT. UPON RECEIPT OF THIS ORDER AND/OR ANY SUBSEQUENT MODIFICATIONS, PLEASE NOTIFY THE GOVERNMENT REPRESENTATIVE WHO NORMALLY SERVICES YOUR PLANT AT LEAST TWO WEEKS IN ADVANCE OF THE TIME AND PLACE OF THE TEST AND THE POST SHOCK TEST INSPECTION AND FUNCTIONAL TESTING FOR ALL WEIGHT CLASSES. PROMPTLY FURNISH A COPY TO THE GOVERNMENT REPRESENTATIVE WHO NORMALLY SERVICES YOUR PLANT OR, IF NONE, TO THE NEAREST ARMY, AIR FORCE, OR DEFENSE SUPPLY AGENCY INSPECTION OFFICES SO THAT APPROPRIATE PLANNING FOR GOVERNMENT INSPECTION CAN BE ACCOMPLISHED. IN THE EVENT THAT THE REPRESENTATIVE OR OFFICE CAN NOT BE LOCATED, OUR PURCHASING DEPARTMENT SHOULD BE NOTIFIED IMMEDIATELY.

YOUR SHIPPING DOCUMENT OR PACKING LIST SHALL BE USED TO INDICATE PERFORMANCE OF REQUIRED GPQA ACTION. THE FOLLOWING STATEMENT OF THE GOVERNMENT REPRESENTATIVE SHALL BE ENTERED ON ALL COPIES

"REQUIRED PQA OF LISTED ITEMS HAS BEEN PERFORMED.  
\_\_\_\_\_  
(SIGNATURE OR DOD STAMP OF  
AUTHORIZED GOV'T REP.)  
\_\_\_\_\_  
(DATE)  
\_\_\_\_\_  
(TYPED NAME OF OFFICE)."

IN NO EVENT SHALL ANY DCMA OR OTHER GOVERNMENT INSPECTION, APPROVAL OR ACCEPTANCE BE CONSTRUED AS INSPECTION, APPROVAL OR ACCEPTANCE ON BEHALF OF PURCHASER OR TO ANY WAY PRECLUDE PURCHASER FOR REJECTING ANY ITEM(S) THAT ARE NOT IN FULL COMPLIANCE WITH ALL PURCHASE ORDER REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO, TIMELY DELIVERY; UNLESS OTHERWISE EXPRESSLY PROVIDED IN THIS PURCHASE ORDER, PURCHASE ACCEPTANCE SHALL BE AFTER RECEIPT INSPECTION BY PURCHASER AT PURCHASER'S NEWPORT NEWS, VA PREMISES.

B. IF SHOCK APPROVAL EXTENSION WILL BE USED TO SHOCK QUALIFY THIS ITEM:

A SHOCK EXTENSION PACKAGE CONSISTING OF THE FOLLOWING SHALL BE SUBMITTED:

1. (7) COPIES OF NAVY APPROVAL LETTER, INCLUDING FIGURE 19 AND THE SHOCK TEST REPORT FOR THE ITEM USED AS THE BASIS FOR THE EXTENSION.
2. DRAWINGS OF THE TESTED AND UNTESTED ITEMS.
3. DIFFERENCES IN THE TWO ITEMS MUST BE CLEARLY IDENTIFIED AND ANALYZED TO SHOW THE UNTESTED ITEM HAS EQUAL OR BETTER SHOCK RESISTANCE. DETAILED ENGINEERING RATIONALE AND/OR SUPPORTING CALCULATIONS MUST BE PROVIDED TO DEMONSTRATE THIS.

IF SHOCK EXTENSION IS NOT APPROVED AND SHOCK TESTING WILL BE REQUIRED, THE VENDOR IS REQUIRED TO NOTIFY THE NORTHROP GRUMMAN NEWPORT NEWS SOURCING REPRESENTATIVE.

C. IF CALCULATIONS/ANALYSIS ARE USED TO SHOCK QUALIFY THIS ITEM:

1. IF THE ITEM IS TO BE GRADE A QUALIFIED, NAVSEA APPROVAL PRIOR TO ANALYSIS MUST BE GRANTED. PLEASE NOTIFY THE NORTHROP GRUMMAN SOURCING REPRESENTATIVE OF YOUR INTENT TO SHOCK QUALIFY THE ITEM USING THIS METHOD SO NAVSEA APPROVAL IS RECEIVED PRIOR TO PROCEEDING.
2. THE MODEL TO BE USED FOR ANALYSIS MUST BE APPROVED PRIOR TO BEGINNING THE ANALYSIS.
3. SEVEN (7) COPIES OF DYNAMIC ANALYSIS CALCULATIONS PERFORMED IN ACCORDANCE WITH NAVSEA-0908-LP-000-3010, Rev 1, SHALL BE SUBMITTED.
4. SEVEN COPIES OF THE REPORT SUMMARIZING THE CALCULATIONS AND THE RESULTS SHALL BE SUBMITTED.

D. IF THE ITEM HAS BEEN PREVIOUSLY SHOCK QUALIFIED:

ONE (1) COPY EACH OF THE NAVY/GOVERNMENT APPROVAL LETTER, INCLUDING FIGURE 19 AND THE SHOCK TEST REPORT SHALL BE PROVIDED. IF THE REPORT NUMBER IS INCLUDED IN THE PURCHASE ORDER AS A SPECIFICATION FOR THE ITEM'S MATERIAL NUMBER AND THERE ARE NO DESIGN CHANGES, THEN SUBMITTAL OF THESE DOCUMENTS IS NOT REQUIRED; SUBMITTAL OF THE CERTIFICATE OF MATERIAL/EQUIPMENT COMPLIANCE FORM PER CODED NOTE Y1920 WILL BE SUFFICIENT.

ONE (1) COPY EACH OF THE NAVY/GOVERNMENT APPROVAL LETTER,  
INCLUDING FIGURE 19 AND THE SHOCK TEST REPORT SHALL BE PROVIDED.  
IF THE REPORT NUMBER IS INCLUDED IN THE PURCHASE ORDER AS A  
SPECIFICATION FOR THE ITEM'S MATERIAL NUMBER AND THERE ARE NO  
DESIGN CHANGES, THEN SUBMITTAL OF THESE DOCUMENTS IS NOT  
REQUIRED; SUBMITTAL OF THE CERTIFICATE OF MATERIAL/EQUIPMENT  
COMPLIANCE FORM PER CODED NOTE Y1920 WILL BE SUFFICIENT.