

NONDESTRUCTIVE TEST AND ALLOY IDENTIFICATION PROCEDURE
APPROVAL

THE REQUIREMENTS CONTAINED HEREIN SHALL APPLY TO THE SELLERS
AND ANY
SUB-TIER SUPPLIERS NONDESTRUCTIVE TEST NDT PROCEDURES USED IN
FULFILLING THE REQUIREMENTS OF THIS PURCHASE ORDER. THIS
STANDARD
CLAUSE IS ALSO APPLICABLE TO ALLOY IDENTIFICATION PROCEDURES.

A. GENERAL REQUIREMENTS FOR NDT PROCEDURES

1. ALL RADIOGRAPHY, MAGNETIC PARTICLE, LIQUID PENETRANT,
ULTRASONIC, EDDY CURRENT, AND VISUAL TESTING MUST BE PERFORMED
IN ACCORDANCE WITH WRITTEN PROCEDURES APPROVED BY THE BUYER.

VISUAL TESTING, AS IT PERTAINS TO THIS STANDARD CLAUSE, IS
ONLY APPLICABLE TO THE INSPECTION OF COMPLETED FABRICATION
WELDMENTS.

2. ALL PROCEDURES SHALL BE UNIQUELY IDENTIFIED BY A PROCEDURE
NUMBER, WITH A REVISION AND DATE.

3. PROCEDURES SHOULD BE SUBMITTED FOR BUYER APPROVAL WITHIN
THIRTY

(30) DAYS OF THE SELLERS RECEIPT OF THE ORDER. PROCEDURES
THAT WILLBE USED DURING THE MANUFACTURE OF THE PURCHASED
ITEM/S SHALL BE APPROVED PRIOR TO THE PERFORMANCE OF ANY SUCH
INSPECTIONS. NDT

PROCEDURES THAT WERE PREVIOUSLY USED TO INSPECT AND CERTIFY
BASE

MATERIAL PROCURED FROM A SUB-TIER SOURCE SHALL BE SUBMITTED
FOR APPROVAL PRIOR TO ANY USAGE OF THAT MATERIAL.

4. ALL PROCEDURE CHANGES OR REVISIONS SHALL BE RESUBMITTED TO
THE BUYER FOR WRITTEN APPROVAL PRIOR TO THE PERFORMANCE OF ANY
TESTING.

MATERIAL INSPECTED IN ACCORDANCE WITH UNAPPROVED CHANGES OR
REVISIONSSHALL BE SUBJECT TO REJECTION.

B. NDT PERFORMANCE SPECIFICATIONS

1. WHERE REFERENCE IS MADE TO THE FOLLOWING PERFORMANCE
SPECIFICATIONS, THE EFFECTIVE ISSUES SHALL BE AS FOLLOWS

MIL-STD-271 SHALL BE NAVSEA TECHNICAL PUBLICATION
T9074-AS-GIB-010/271; REVISION F MAY ONLY BE USED AS PERMITTED
IN PARAGRAPH B.2 BELOW.

NAVSEA TECHNICAL PUBLICATION T9074-AS-GIB-010/271 SHALL BE DATED 30APRIL 1997 WITH NOTICE 1 DATED 16 FEBRUARY 1999 AND AS MODIFIED BY EB SPEC 3900.

NAVSEA 0900-LP-003-8000, NAVSEA 0900-LP-003-9000, AND NAVSEA 0900-LP-006-3010 SHALL BE MIL-STD-2035.

MIL-STD-2035 SHALL BE REVISION A.

NAVSEA 250-1500-1 SHALL BE REVISION 16 WITH ACN NO5.

MIL-STD-2132 SHALL BE REVISION D.

NSTR-99 SHALL BE REVISION 4.

IF AN ELECTRIC BOAT COMPONENT SPECIFICATION NAVSEA APPROVED INVOKES SPECIFICATION REVISIONS THAT CONFLICT WITH THE ABOVE, THE COMPONENT SPECIFICATION SHALL TAKE PRECEDENCE.

2. THE USE OF PROCEDURES PREVIOUSLY APPROVED TO THE REQUIREMENTS OF MIL-STD-271, REVISION F IS STILL PERMITTED, PROVIDED THE GUIDELINES OF SECTION I ARE MET. HOWEVER, ANY SUBMITTAL OF NEW OR REVISED PROCEDURES SHALL COMPLY WITH NAVSEA TECHNICAL PUBLICATION T9074-AS-GIB-010/271 EVEN IF MIL-STD-271 IS INVOKED.

C. VENDOR PROCEDURE APPROVAL REQUEST, VPAR.

1. ALL SELLER AND SUB-TIER SUPPLIER NDT PROCEDURES SHALL BE FORWARDED TO THE BUYER VIA A PROPERLY COMPLETED VENDOR PROCEDURE APPROVAL REQUEST VPAR, EB FORM 84-01-2974. EACH PROCEDURE SHALL BE SUBMITTED SEPARATELY. THE SELLER SHALL SEND THE VPAR AND A COPY OF THE PROCEDURE TO THE BUYER DESIGNATED ON THIS PURCHASE ORDER. THE VPAR SHALL BE DISPOSITIONED BY THE BUYERS DESIGNATED REPRESENTATIVE AND SHALL SERVE AS THE SELLERS PROCESS APPROVAL, WHEN APPROVED.

2. TO EXPEDITE PROCEDURE APPROVAL, THE SELLER SHOULD ASSURE THAT THE VPAR FORM IS COMPLETED PROPERLY AND ALL PERTINENT INFORMATION IS INCLUDED. PARTICULAR ATTENTION SHOULD BE APPLIED TO THE FOLLOWING SECTIONS

A. BLOCK 10. THIS BLOCK IS INTENDED TO IDENTIFY THE APPLICABLE DRAWING. WITHOUT THIS INFORMATION, THE BUYER CANNOT VERIFY THE APPLICATION FOR WHICH THE VPAR IS BEING SUBMITTED. IF THE SAME TECHNIQUE WILL BE APPLIED TO NUMEROUS DRAWINGS, VARIOUS SHOULD BE ENTERED IN THIS BLOCK AND AN EXPLANATION ENTERED IN BLOCK 13. IF DRAWINGS ARE NOT APPLICABLE TO THIS ORDER, N/A SHOULD BE ENTERED.

B. BLOCK 11. THIS BLOCK IS INTENDED TO IDENTIFY THE PIECE MARK ON THE DRAWING IDENTIFIED IN BLOCK 10 FOR WHICH THE PROCEDURE APPROVAL IS BEING REQUESTED. IF A PIECE MARK IS NOT APPLICABLE, ENTER N/A. WHERE THE PURCHASE ORDER REFERENCES A BUYERS PART NUMBER FOR RAW MATERIAL, THAT NUMBER SHOULD BE ENTERED.

C. BLOCK 12. THIS BLOCK SHOULD REFERENCE THE PERFORMANCE SPECIFICATION AND ACCEPTANCE SPECIFICATION FOR WHICH THE PROCEDURE APPROVAL IS BEING REQUESTED.
FOR EXAMPLE, T9074-AS-GIB-010/271 AND MIL-T-16420K(1), OR MIL-STD-2132D AND MIL-F-23509F(1), ETC.

D. BLOCK 13. THIS BLOCK IS INTENDED TO PROVIDE INFORMATION TO THE BUYER PERTAINING TO THE SPECIFIC PROCEDURE FOR WHICH APPROVAL IS BEING REQUESTED, E.G., PROCEDURE NUMBER, REVISION, DATE, AND ANY ATTACHMENTS/ADDENDA/SUPPLEMENTS, ETC.

THIS BLOCK SHOULD ALSO STATE THE APPLICATIONS FOR WHICH APPROVAL IS BEING REQUESTED AND THE APPLICABLE ACCEPTANCE CRITERIA E.G., PT OF NAVSEA TECHNICAL PUBLICATION S9074-AR-GIB-010/278, P-1 WELDS WITH ACCEPTANCE TO MIL-STD-2035A, SECTION 7.2, CLASS 1.

IF CLARIFICATION TO BLOCKS 10 AND 11 IS REQUIRED, THIS BLOCK SHOULD BE UTILIZED E.G., PIPING DETAILS ARE BEING FABRICATED TO VARIOUS DRAWINGS AND VARIOUS PIECE MARKS. ALL WELDING IS IN ACCORDANCE WITH NAVSEA TECHNICAL PUBLICATION S9074-AR-GIB-010/278, CLASS P-1. IF PROCEDURE APPROVAL IS BEING REQUESTED FOR MORE THAN ONE APPLICATION, EACH APPLICATION AND ACCEPTANCE SPECIFICATION SHOULD BE CLEARLY STATED E.G., PT OF NICUAL FASTENERS AND WELD REPAIRS TO CUNI CASTINGS.

3. WHEN RADIOGRAPHY IS REQUIRED, THE SELLER IS RESPONSIBLE FOR THE REVIEW AND APPROVAL OF ALL PRODUCTION RADIOGRAPHS. IN ADDITION, THE SELLER SHALL FORWARD TO THE BUYER ALL PRODUCTION RADIOGRAPHS VIA A PROPERLY COMPLETED VPAR. THE BUYER MUST APPROVE ALL RADIOGRAPHS, INCLUDING ALL REPAIR CYCLES, PRIOR TO SHIPMENT OF HARDWARE UNLESS THE REQUIREMENT IS SPECIFICALLY WAIVED IN WRITING BY THE BUYER.

D. GENERAL REQUIREMENTS FOR PROCEDURE APPROVAL

1. THE BUYER REVIEWS SELLER AND SUB-TIER SUPPLIER NDT PROCEDURES TO ASSURE COMPLIANCE WITH APPLICABLE PERFORMANCE DOCUMENTS AND ACCEPTANCE CRITERIA SPECIFICATIONS. IN GENERAL, ANY PORTION OF A PERFORMANCE DOCUMENT OR ACCEPTANCE SPECIFICATION THAT CONTAINS THE WORD SHALL MUST BE INCLUDED IN

THE VENDOR PROCEDURE.

2. ALL NDT PROCEDURES SHALL BE SIGNED FOR BY THE PERFORMING ACTIVITY'S COGNIZANT LEVEL III TEST EXAMINER DENOTING APPROVAL.

3. ALL NDT PROCEDURES, WITH THE EXCEPTION OF RADIOGRAPHY, MUST CONTAIN DETAILED ACCEPTANCE CRITERIA AS REQUIRED BY THIS PURCHASE ORDER AND APPLICABLE SPECIFICATIONS AND DRAWINGS. ACCEPTANCE CRITERIA MAY BE CONTAINED IN SEPARATE ATTACHMENTS/ADDENDA/SUPPLEMENTS TO THE BASE PERFORMANCE PROCEDURE. ACCEPTANCE CRITERIA SHALL BE DETAILED ENOUGH TO BE SELF-STANDING, E.G., NOT JUST REFERRING TO THE PARAGRAPH BUT RATHER CITING THE WORDING, AS OFTEN AS IS PRACTICAL. NOTED EXCEPTIONS ARE

SAE J122/123.

FF-S-86

E. ADDITIONAL REQUIREMENTS FOR NAVSEA TECHNICAL PUBLICATION T9074-AS-GIB-010/271 PROCEDURES

1. WHENEVER NAVSEA TECHNICAL PUBLICATION T9074-AS-GIB-010/271 IS

INVOKED, THE FOLLOWING MUST BE INCLUDED IN ALL NDT PROCEDURES
A STATEMENT IS REQUIRED THAT THE PROCEDURE IS IN ACCORDANCE WITH THE REQUIREMENTS OF NAVSEA TECHNICAL PUBLICATION T9074-AS-GIB-010/271 TO MEET THE REQUIREMENT OF PARAGRAPH 1.7.1.

A STATEMENT IS REQUIRED THAT PERSONNEL CERTIFICATIONS MUST BE IN ACCORDANCE WITH SNT-TC-1A, AS A MINIMUM REQUIREMENT, EXCEPT AS MODIFIED BY SECTION 1 OF NAVSEA TECHNICAL PUBLICATION T9074-AS-GIB-010/271 TO MEET THE REQUIREMENT OF PARAGRAPH 1.6.

A STATEMENT IS REQUIRED THAT ACCEPTANCE INSPECTIONS SHALL BE PERFORMED ON AN ITEM IN THE FINAL SURFACE AND HEAT-TREATED CONDITION, UNLESS OTHERWISE SPECIFIED, TO MEET THE REQUIREMENT OF PARAGRAPH 1.4. HOWEVER, IT IS ALSO RECOGNIZED THAT UT INSPECTION IS TYPICALLY PERFORMED WHEN THE PART HAS A SIMPLE GEOMETRY I.E. PRIOR TO FINAL MACHINING PER PARAGRAPH 6.3.

2. WHENEVER NAVSEA TECHNICAL PUBLICATION T9074-AS-GIB-010/271 IS

INVOKED, THE MINIMUM PROCEDURAL ELEMENTS ARE CONTAINED IN EACH NDT

SECTION RT - PARAGRAPH 3.3.2, MT - PARAGRAPH 4.3.1.2, PT - PARAGRAPH 5.4.2, UT - PARAGRAPH 6.5.2, ET - PARAGRAPH 7.3.2, PARAGRAPH VT - 8.3, RESPECTIVELY. ADDITIONALLY, THE FOLLOWING INFORMATION MUST ALSO BE CONTAINED IN ALL NDT PROCEDURES

MAGNETIC PARTICLE TESTING
LIGHTING REQUIREMENTS.
FINAL CLEANING.

LIQUID PENETRANT TESTING
MATERIAL TO BE TESTED; E.G., WELDS, WELD REPAIRS, CASTINGS,
ETC. SURFACE PREPARATION.

LIGHTING REQUIREMENTS.
ALL PENETRANTS, EMULSIFIERS, REMOVERS, AND DEVELOPERS SHALL
BE
INCLUDED ON THE QUALIFIED PRODUCTS LIST OF THE LATEST REVISION
OF AMS 2644.

ULTRASONIC TESTING
THE INSTRUMENT MODEL/S ALLOWED FOR THE INSPECTION.
EQUIPMENT QUALIFICATION METHOD OR REFERENCE TO A
QUALIFICATION
PROCEDURE.
DESCRIPTION OF THE REFERENCE CALIBRATION STANDARD.

VISUAL TESTING
TYPE OF WELDS OR SURFACES TO BE INSPECTED.
NOTE UNLESS OTHERWISE STATED IN THE ORDERING DATA OR
DOCUMENT/S INVOKED, THIS REQUIREMENT CAN BE SATISFIED BY
SIMPLY OFFERING AN OPENING STATEMENT TO THE EFFECT THAT THIS
PROCEDURE SPECIFIES THE REQUIREMENTS FOR PERFORMING THE VISUAL
INSPECTION OF COMPLETED FABRICATION WELDMENTS IN ACCORDANCE
WITH ENTER APPLICABLE SPECIFICATION".

F. ELECTRIC BOAT APPROVAL

1. PROVIDED THE METHODOLOGY AND ACCEPTANCE CRITERIA CONTAINED
IN AN NDT PROCEDURE ARE ACCEPTABLE, THE BUYERS APPROVAL WILL
BE GRANTED FOR THE SPECIFIC APPLICATION/S REQUESTED BY THE
SELLER. FOR EXAMPLE, IF A PENETRANT PROCEDURE IS SUBMITTED
FOR THE INSPECTION OF MIL-S-1222H NICU BOLTS, THE BUYERS
EVALUATION SHOULD STATE THIS PROCEDURE HAS BEEN REVIEWED AND
APPROVED FOR THE PENETRANT TESTING LIST THE TYPE AND METHOD OF
MIL-S-1222H FASTENERS IN ACCORDANCE WITH NAVSEA TECHNICAL
PUBLICATION T9074-AS-GIB-010/271 WITH ACCEPTANCE TO SAE J123C.
IF THE VENDOR PROCEDURE ALSO CONTAINS ACCEPTANCE CRITERIA FOR
OTHER APPLICATIONS SUCH AS FORGINGS OR CASTINGS, BUT APPROVAL
IS NOT REQUESTED IN BLOCK 13 OF THE VPAR AND NOT REQUIRED BY
THIS PURCHASE ORDER, PROCEDURE APPROVAL FOR THOSE OTHER
APPLICATIONS WILL NOT BE GRANTED. THE SELLER MUST THEN
RESUBMIT THIS PROCEDURE TO OBTAIN BUYER APPROVAL PRIOR TO
USAGE ON ANY OTHER APPLICATIONS.

2. IN SELECTED INSTANCES, THE BUYER MAY APPROVE A PROCEDURE WITH COMMENTS. IN SUCH INSTANCES, THE PERFORMING ACTIVITIES INSPECTION PERSONNEL MUST BE MADE AWARE OF THESE COMMENTS AND ALL TESTING SHALL BE PERFORMED TO INSTRUCTIONS INCORPORATING THESE COMMENTS. IN ADDITION, THE SELLER OR SUB-TIER SUPPLIER MUST INCORPORATE THEM AND RESUBMIT A REVISED PROCEDURE FOR BUYER APPROVAL PRIOR TO FUTURE USE.

G. ALLOY IDENTIFICATION PROCEDURE REVIEW

1. ALL PROCEDURES SHALL BE UNIQUELY IDENTIFIED BY A PROCEDURE NUMBER, WITH A REVISION AND DATE.

2. THE ALLOY IDENTITY PROCEDURE SUBMITTED FOR APPROVAL SHALL CONTAIN THE FOLLOWING AS A MINIMUM

A. SCOPE - THE PROCEDURE SHALL INCLUDE A LIST OF ALL THE GENERIC MATERIALS MANUFACTURED OR USED IN THE SELLERS OR SUPPLIERS SHOP AND THE TESTING INSTRUMENT/S USED TO SEPARATE EACH.

B. EQUIPMENT DESCRIPTION - THE PROCEDURE SHALL STATE THE TESTING INSTRUMENT BRAND NAME, MODEL NUMBER AND PRINCIPLE OF OPERATION.

C. EQUIPMENT SETUP - THE PROCEDURE SHALL LIST THE STEPS NECESSARY FOR EQUIPMENT SETUP AND PREPARATION FOR USE.

D. INSTRUMENT CHECK OR CALIBRATION - THE PROCEDURE SHALL PROVIDE MEANS FOR DETERMINING THAT THE TESTING INSTRUMENT IS FUNCTIONING PROPERLY. IF A CALIBRATION STANDARD OF KNOWN VALUE IS USED, AN ACCEPTANCE CRITERIA FOR PROPER CALIBRATION SHALL ALSO BE GIVEN, AND SHALL AS A MINIMUM BE PRIOR TO AND AT THE CONCLUSION OF TESTING, AND AFTER ANY CHANGE IN OPERATOR, EQUIPMENT OR PERIODS OF INACTIVITY. APPROPRIATE DOCUMENTATION OF THE CALIBRATION STANDARD COMPOSITION SHALL BE MAINTAINED ON FILE BY THE SUPPLIER.

E. TESTING OF MATERIAL - THE PROCEDURE SHALL INCLUDE DETAILS OF TESTING TECHNIQUE INCLUDING INSTRUMENT SETTINGS, POSITIONING OF INSTRUMENT PROBES AND PRECAUTIONS CONCERNING CONDITION OF MATERIAL TO

BE TESTED SUCH AS FREE FROM OIL, GREASE, OXIDE, SCALE AND FILM AS APPROPRIATE.

F. ACCEPTANCE CRITERIA - THE PROCEDURE SHALL PROVIDE ACCEPTANCE CRITERIA FOR EACH OF THE GENERIC MATERIALS MANUFACTURED OR USED IN THE SUPPLIERS SHOP.

G. OVERLAP - THE PROCEDURE SHALL ADDRESS THE QUESTION OF OVERLAP OF READINGS AMONG DIFFERENT GENERIC MATERIALS. IT SHALL CONTAIN ADEQUATE INSTRUCTIONS ON SUPPLEMENTAL TESTS USE OF MAGNET, SPECTROGRAPHIC ANALYSIS, ETC., TO DISTINGUISH BETWEEN SUCH MATERIALS AND TO PROVIDE POSITIVE IDENTIFICATION WHEN OVERLAP OCCURS.

3. GENERIC MATERIALS SHALL INCLUDE BUT ARE NOT LIMITED TO THOSE LISTED BELOW. OTHER MATERIALS ENCOUNTERED IN WORK WHICH ARE NOT LISTED HERE ALSO REQUIRE THE GENERIC IDENTITY CHECK.

NICUAL-CHROMIUM-IRON BASE ALLOYS INCONELS AND HASTELLOYS
K-MONEL
COPPER-NICUAL ALLOYS CUPRO-NICKELS
NICKEL-COPPER ALLOYS MONELS
AUSTENITIC STAINLESS STEELS AISI 300 SERIES
MARTENSITIC & FERRITIC STAINLESS STEELS AISI 400 SERIES &
17-4 PH
CLASS
CARBON AND ALLOY STEELS
TITANIUM ALLOYS
COBALT BASE ALLOYS STELLITES
NICKEL-CHROMIUM-BORON ALLOYS COLMONOYS
COPPER
BRONZE
NICKEL-ALUMINUM BRONZE
BRASS
SILVER BRAZING MATERIAL

4. MATERIAL NOT MEETING THE ACCEPTANCE CRITERIA IN THE APPROVED ALLOY IDENTITY TESTING PROCEDURE SHALL BE REJECTED.

H. RESUBMITTAL OF SELLER AND SUB-TIER SUPPLIER PROCEDURES

1. THE SELLER OR SUB-TIER SUPPLIER MAY BE REQUIRED TO RESUBMIT PROCEDURES DUE TO DISAPPROVAL, CHANGES IN APPLICATION OR ACCEPTANCE CRITERIA, OR PERIODIC MODIFICATIONS TO PERFORMANCE AND ACCEPTANCE SPECIFICATIONS. RESUBMITTALS SHALL BE TIMELY AND IN ALL CASES, BUYERS APPROVAL OF THE RESUBMITTED PROCEDURE

IS REQUIRED PRIOR TO USE. IN SUCH INSTANCES, THE SELLER SHOULD AGAIN UTILIZE A VPAR TO EXPLAIN WHY THE PROCEDURE IS BEING RESUBMITTED, LETTER NUMBER AND DATE OF PREVIOUS SUBMITTAL AND IDENTIFICATION OF HOW THE PROCEDURE HAS BEEN MODIFIED, IF AT ALL. THIS INFORMATION WILL ASSIST IN THE EVALUATION OF THE PROCEDURE AND EXPEDITE APPROVAL.

2. RADIOGRAPHIC PROCEDURES REVISED TO DENOTE WHEN X-RAY MACHINE TUBES ARE CHANGED AND THE NEW FOCAL SPOT IS EQUAL TO OR LESS THAN THE ORIGINAL OR FOR NEW ISOTOPE SOURCES WHERE THE PHYSICAL SIZE IS EQUAL TO OR LESS THAN THAT OF THE LARGEST SOURCE, OF SAME TYPE, ORIGINALLY QUALIFIED DO NOT REQUIRE RESUBMITTAL FOR APPROVAL.

I. PROCEDURES PREVIOUSLY APPROVED

1. FOR SELLERS THAT RECEIVE MULTIPLE OR REPETITIVE ORDERS THAT APPLY TO SIMILAR ITEMS, IT IS NOT ALWAYS NECESSARY TO SUBMIT A VPAR FOR EVERY APPLICATION. PREVIOUSLY APPROVED PROCEDURES MAY BE USED PROVIDED THE FOLLOWING CONDITIONS ARE SATISFIED

A. THE PROCEDURE, INCLUDING REVISION, AND ANY ASSOCIATED ATTACHMENTS/ADDENDA/SUPPLEMENTS, IS THE SAME AS WAS PREVIOUSLY APPROVED BY THE BUYER.

B. THE PROCEDURE COVERS THE SAME TYPE OF PROCESS, PROCESS SPECIFICATION REVISION, MATERIAL SPECIFICATION REVISION, APPLICATION AND ACCEPTANCE CRITERIA. IN ADDITION, THE CONFIGURATION MUST BE THE SAME, I.E., THE PROPOSED NDT METHOD CAN TECHNICALLY BE APPLIED WITH QUALITY RESULTS AS DETERMINED BY THE PERFORMING ACTIVITY'S COGNIZANT LEVEL III TEST EXAMINER WITH RESPECT TO SIZE AND SHAPE.

2. NDT PROCEDURES PREVIOUSLY APPROVED TO THE REQUIREMENTS OF MIL-STD-271, REVISION F MAY CONTINUE TO BE USED PROVIDED ALL THE REQUIREMENTS SET FORTH ABOVE ARE FOLLOWED.

3. WHERE THE SELLER ELECTS TO USE PROCEDURES PREVIOUSLY APPROVED, A COPY OF THE BUYERS PREVIOUSLY APPROVED ELECTRIC BOAT VPAR OR EQUIVALENT NORTHROP GRUMMAN SHIPBUILDING VPAR AND APPLICABLE NORTHROP GRUMMAN SHIPBUILDING APPROVAL LETTER MEETING ALL THESE CONDITIONS SHALL BE FURNISHED WITH THE SHIPMENT.

4. PROCEDURES PREVIOUSLY APPROVED BY EITHER ELECTRIC BOAT OR NORTHROP GRUMMAN SHIPBUILDING ARE ACCEPTED BY BOTH SHIPBUILDERS FOR VIRGINIA CLASS PROCUREMENTS ONLY.

J. TEST REPORTS FOR PERFORMANCE OF NDT

1. WHEN SPECIFIED, REPORTS SHOWING THE RESULTS OF EACH TEST PERFORMED WITHIN THE SPECIFIED NONDESTRUCTIVE TEST METHOD ARE REQUIRED. GUIDELINES FOR PROPER TEST REPORT REQUIREMENTS ARE AS DETAILED IN APPLICABLE SPECIFICATIONS. WHERE GUIDANCE IS NOT PROVIDED, THE SELLER SHALL RECORD THE BELOW LISTED INFORMATION, AS A MINIMUM.

- A. THE NDT METHOD/S USED.
- B. DESCRIPTION OR UNIQUE IDENTIFICATION OF THE ITEM INSPECTED.
- C. PROCEDURE IDENTIFICATION.
- D. THE PERFORMING ACTIVITY, WHETHER IT BE THE SELLER, A SUB-TIER SUPPLIER OR A TEST LAB.
- E. QUANTITY INSPECTED.
- F. ACCEPTANCE STANDARD USED.
- G. QUANTITY ACCEPTED/REJECTED.
- H. DATE OF INITIAL INSPECTION AND INSPECTOR IDENTIFICATION.

2. IN ADDITION, THE SELLER SHALL ATTACH A COPY OF THE BUYERS VPAR THAT APPROVED THE PROCEDURE TO THE TEST REPORT.

3. TEST REPORTS AND/OR OTHER VERIFICATION OF CONFORMANCE DOCUMENTS SHALL BE SIGNED AND DATED BY THE SELLERS AUTHORIZED REPRESENTATIVE.

4. EVIDENCE OF ALL TESTS AND INSPECTIONS PERFORMED, AS REQUIRED BY THIS PURCHASE ORDER OR SPECIFICATION, MUST BE MAINTAINED BY THE SELLER. HOWEVER, RECORDS REQUIRED TO BE SUBMITTED BY THIS PURCHASE ORDER OR SPECIFICATION SHALL BE FORWARDED WITH EACH SHIPMENT. TEST REPORTS SHALL BE ATTACHED TO THE PACKING LIST. WHERE MORE THAN ONE CONTAINER OR PACKAGE IS INCLUDED IN THE SHIPMENT, THE TEST REPORTS SHALL BE ATTACHED SECURELY TO OR PLACED IN ONE CONTAINER OR PACKAGE AND CLEARLY IDENTIFIED ON THE OUTSIDE.

FOR PURCHASE ORDERS THAT ORIGINATE FROM NORTHROP GRUMMAN NEWPORT NEWS SHIPBUILDING, 4101 WASHINGTON AVE, NEWPORT NEWS, VA. 23607, YOU ARE REQUESTED TO FORWARD ALL UNAPPROVED SOFTWARE DELIVERABLES IDENTIFIED HEREIN AS FOLLOWS

PURCHASE ORDERS WHOSE LINE ITEM MATERIAL GROUP IS IDENTIFIED AS CM-I, CM-III, CM(-), CM-A OR CM-FAC

DEPARTMENT E89, BLDG 600/1
ATTN SOFTWARE COORDINATOR

PURCHASE ORDERS WHOSE LINE ITEM MATERIAL GROUP IS
IDENTIFIED OTHER THAN CITED ABOVE

DEPARTMENT E45(VCS), BLDG 600/2
ATTN SOFTWARE COORDINATOR

SOFTWARE DELIVERABLES PREVIOUSLY APPROVED SHALL BE
PROVIDED AS PART OF THE HARDWARE DELIVERABLES.