

NONDESTRUCTIVE TESTING (NDT) PROCEDURE / TECHNIQUE SUBMITTAL REQUIREMENTS

Due to an extensive revision, revision bars are not used.

1.0 APPLICABILITY

1.1 This Memorandum is applicable to facilities performing Nondestructive Testing (NDT) under Boeing St. Louis Purchase Orders. This memorandum shall be used to determine when NDT Procedure / Techniques require submission to Boeing St. Louis Supplier Quality (SQ) for approval. Major Subcontractors are required to define their own submittal practices in accordance with contract requirements.

1.2 This Memorandum is only applicable to the following Boeing St Louis Process Specifications:

PS 21201	PS 21211	PS 21221
PS 21202	PS 21211.1	PS 21233
PS 21206	PS 21211.3	PS 21244
PS 21206.1	PS 21211.4	PS 21263
PS 21206.6	PS 21211.5	PS 21293

1.3 Questions / Procedures / Techniques shall be directed to:

Boeing St. Louis
Supplier Quality
STLNDTSQ@Boeing.com

2.0 PROCEDURE / TECHNIQUE SUBMITTAL

2.1 Process Specifications in paragraph 1.2 require Boeing St. Louis Supplier Quality (SQ) to define the requirements for Procedure / Technique submittal.

2.2 Enclosure 1 to this document will serve as a decision-making flow chart for Major subcontractors, Suppliers or NDT Processors performing NDT inspection to the Process Specifications in paragraph 1.2.

2.3 All NDT Procedures / Techniques for Process Specifications in paragraph 1.2, which have not yet been submitted, shall be evaluated by the subcontractor or Supplier / NDT processor Level 3 for submittal requirements. Based upon evaluation results, follow the guidelines of Enclosure 1. Submit NDT Procedures to Boeing St. Louis SQ per paragraph 1.3.

3.0 PROCEDURE / TECHNIQUE APPROVAL

3.1 Boeing St. Louis SQ approval of NDT Procedure / Techniques written to the requirements of the process specifications in paragraph 1.2, is only required when one or more of the following conditions exist. (Ref. Enclosure 1)

3.1.1 The item or component to be tested is:

PROGRAM or TYPE 1/ 2/	CONDITION 1/
F-18 C/D and E/F/G	Maintenance Critical, Fracture Critical, or Fracture Critical Traceable
F-15	Safety of Flight
C-17	If DPS 4.747 is referenced on Engineering Drawing
T-45	Fracture Critical
AV-8	Critical
Composite	If PS 21233, PS 21263, PS 21293, or DPS 4.738 is referenced on Engineering Drawing or another Process Specification
Casting (All Programs)	Class 1 - All Grades Class 2 - Grades A and B
Missile Components (All Programs)	Category 1
Pyrotechnics	All
Major Subcontractor Components	Defined by Major Subcontractors

1/ If NDT is to be performed at a stage of manufacturing other than that specified by Engineering Drawings, Boeing St. Louis SQ shall be alerted to the situation for further disposition even if the part does not meet the Programs / Types / Conditions listed in this table. (e.g. "Partially machined items which should have been tested as raw material")

3.2 Boeing St. Louis SQ approval is not required for NDT Procedure / Techniques written to the Process Specifications in paragraph 1.2 when conditions other than those defined in 3.1.1 exist, unless specifically directed by the Process Specification, Engineering Order, Blueprint, Procurement Specification, or other higher order document. (Ref. Enclosure 1)

4.0 PROCEDURE / TECHNIQUE REVISIONS DUE TO PART DASH NUMBER CHANGES

4.1 When NDT is performed to the process specifications in paragraph 1.2, the following conditions apply: (Ref. Enclosure 1)

4.1.1 If the Part Dash Number change has NO AFFECT on the technical application of the NDT process defined, (i.e.: the parameters changed will not reduce the quality of the NDT data produced), submittal and re-approval is not required. (Ref. Enclosure 1)

4.1.2 If the Part Dash Number change DOES AFFECT the technical application of the NDT process defined, and is applicable to items or components in 3.1.1, submit the revised Procedure / Technique for approval. (Ref. Enclosure 1)

4.1.3 If the Part Dash Number change is NOT applicable to items or components in 3.1.1, no submission for approval is required regardless of the affect to the NDT Procedure/Technique. (Ref. Enclosure 1)

4.1.4 When NDT Procedure revisions are being submitted for approval, the transmittal should include a brief outline of the changes, as well as the reason(s) for the change.

4.1.5 Procedures / Techniques for Penetrant Inspection (PS 21202) are not required by Part Number unless compliance to DPS 4.747 is required.

5.0 PROCEDURE / TECHNIQUE REVISIONS DUE TO OTHER CHANGES

5.1 Initial approval by Boeing St. Louis SQ of General Procedure / Technique(s) is required.

5.2 Revisions to General Procedure / Techniques require approval by Boeing St. Louis SQ when they represent a technical change(s) that may effect the testing method / results.

5.3 When revisions to Boeing St. Louis Process Specifications listed in 1.2 contain Technical Changes, the NDT Processor shall review the Technical Changes

5.3.1 If changes to Procedures / Techniques are needed, approval by Boeing St. Louis SQ is required.

5.3.2 If changes to Procedures / Techniques are not needed, the NDT Processor shall submit a memo / notice to Boeing St. Louis SQ indicating the Process Specification revision was reviewed and no changes to Procedures / Techniques is required.

6.0 Summary

6.1 If the Supplier / NDT Processor Level 3 is uncertain whether a Procedure / Technique requires Boeing St. Louis SQ approval, please contact Boeing St. Louis SQ for a disposition.

6.2 For all procedures / techniques submitted, Boeing St. Louis SQ will respond with a disposition of Approved, Approved with Comment / Action, or Disapproved.

6.3 NDT Procedure approval does not relieve the Seller of the requirement to use Boeing Approved Process Sources per D1-4426.

6.4 The NDT Processor is responsible to provide evidence of NDT procedure approval (when required) to the Supplier.

ENCLOSURE 1

PROCEDURE / TECHNIQUE SUBMITTAL FLOW

