LOCKHEED-MARTIN
Tactical Aircraft Systems
Code Identification 81755
Contract No. F33657-84-C-0247

FQPL: NDTS 1101-17
Dated: 22 June 1996
Supersedes FQPL: NDTS 1101-16
Dated: 19 July 1995

Fort Worth Qualified Processors List

FWQPL NDTS 1101-17

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Prepared By:

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Approved By:

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Date: 12 July 96

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Date: 7/16/96

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FWQPL NDTS 1101-17

This Fort Worth Qualified Processors List (FQPL) is incomplete without NDTS 1101. To be qualified to perform penetrant inspection on Zone 1A, 1B and/or 1 C parts, processors must successfully complete the **penetrant** demonstration program per NDTS 1101. Processors are approved on the date of issue of the Process Control Investigation Report **(PCIR)** to the penetrant material(s) and inspection Zone(s) listed.

Procesor s that change penetrant materials used for Zone 1A, 1B a n d / o r 1C parts must re-demonstrate to qualify the new materi al(s) before they can process Zone 1A, 1B a n d / o r 1C parts with the new material(s).

Processors qualifying with developer must use the developer listed. All other Processors listed in the FQPL have qualified without the use of developer, which allows them to either process with or without developer.

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Supersedes FQPL: NDTS 1101-16
Dated: 19 July 1995

Fort Worth Qualified Processors List

CHANGE INDEX

Changes to FQPL 1101-16 are identified below and have been incorporated into FQPL 1101-17

Processor	Change	Reason For Change
Lockheed/Abilene P.O. Box 1401 Abilene, Texas 79605	Removed from list	Out of Business
Added: Klune Industries ** 1800 North 300 West Spanish Fort, Utah 84660 (801) 798-7401 Demonstrated: (Mr.Doyle Jones) (Mr.Blake Johnson)	Magnaflux ZL-67 Penetrant (Type 1, Method A, Level 3) and Magnaflux ZP-4B Dry Developer (Form A)	Added per PCIR 1717 Zone 1A 4/16/96
Israel Aircraft Industries Ben Gurion International ** Airport Tel Aviv, Israel Demonstrated: (Mr.Belkar Solomon) (Mr.Shaul Fruchtman)	Added: Magnaflux ZL-67 Penetrant (Type 1, Method A, Level 3) and Magnaflux ZP-4B Dry Developer (Form A)	Added per PCIR 1696 Zone 1A 9/14/95

LOCKHEED-MARTIN
Tactical Aircraft Systems
Code Identification 81755
Contract No. **F33657-84-C-0247**

Dated: 22 June 1996
Supersedes FQPL: NDTS 1101-16
Dated: 19 July 1995

Fort Worth Qualified Processors List

Processor	Penetrant Materials	Report Number	Date Approved	Zone
AAA Plating and Insp. 424 Dixon St. Compton, California 90222	Met-L-Check FP-903 Penetrant (Type 1, Method A, Level 3)	PCIR 1449	05/04/89	1A,1B,1C
Anadite Inc. 10647 Garfield Ave. Southgate, California 90280	Ardrox P-135D Penetrant (Type 1, Method A, Level 3)	PCIR 1446	05/04/89	-
Anco Metal Improvement 417 W.164th St. Gardena, California 90248	Ardrox P6F-5 (or equivalent P-136E) Penetrant (Type 1, Method A, Level 4)	PCIR 1450	05/04/89	1A, 1B, 1C
	Ardrox P-135D Penetrant (Type 1, Method A, Level 3)	PCIR 1634	04/05/93	1A
Daewoo Heavy Ind.,Ltd. Changwon 615 Changwon, Korea	Magnaflux ZL-56 Penetrant (Type 1, Method A, Level 4)	PCIR 1411	08/10/88	1A,1B,1C
D.V. Industries 2605 Industry Way Lynwood, California 90262	Ardrox P6F-4 Penetrant (Type 1, Method A, Level 3)	PCIR 1447	05/04/89	1A,1B,1C
	Sherwin HM 604 (Type 1, Method A, Level 3)	PCIR 1633	04/05/93	1A
Fokker/Papendrecht Fokker-VFW B.V. P.O. Box 1 3351 AK Papendrecht The Netherlands	Ardrox P6F-5 (or equivalent P-136E) Penetrant (Type 1, Method A, Level 4)	PCIR 1420	10/04/88	1A,1B,1C
Fokker/Schiphol Fokker-VFW B.V. P.O. Box 7600 1117 ZJ Schiphol-Zuidoost The Netherlands	Magnaflux ZL-56 Penetrant (Type 1, Method A, Level 4)	PCIR 1401	05/26/88	-
	Ardrox P6F-5 (or equivalent P-136E) Penetrant (Type 1, Method A, Level 4)	PCIR 1421	10/04/88	1A,1B,1C

** Changes This Revision

Fort Worth Qualified Processors List

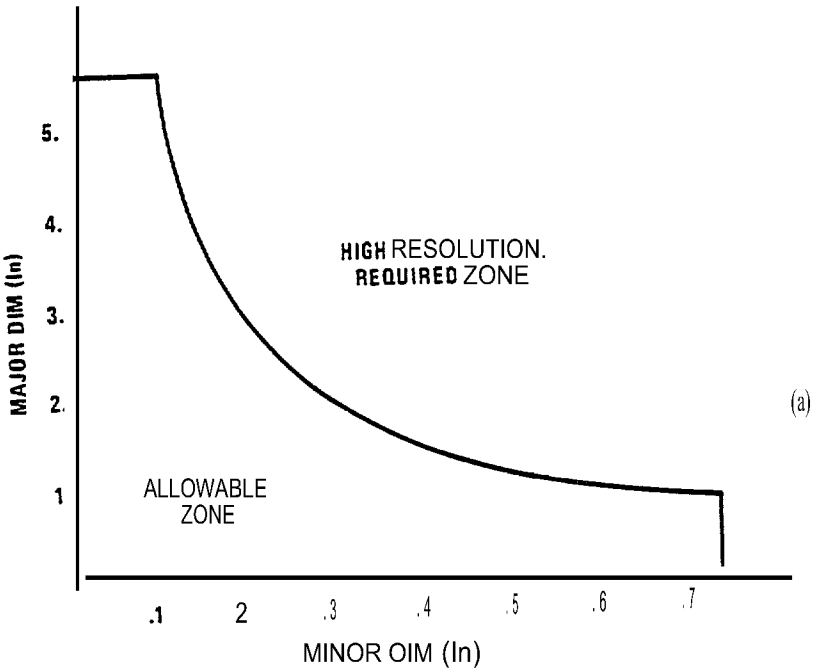
Processor	Penetrant Materials	Report Number	Date Approved	Zone
** Klune Industries 1800 North 300 West Spanish Fort, Utah 84660 (801) 798-7401 Demonstrated: (Mr.Doyle Jones) (Mr.Blake Johnson)	Magnaflux ZL-67 Penetrant (Type 1, Method A, Level 3) and Magnaflux ZP-4B Dry Developer (Form A)	PCIR 1717	04/16/96	1A
Lockheed/Fort Worth P.O. Box 748 Fort Worth, Texas 76101	Magnaflux ZL-56 Penetrant (Type 1, Method A, Level 4)	PCIR 1392	04/25)88	1A,1B,1C
	Sherwin HM-607 (Type 1, Method A, Level 3)	PCIR 1594	05/20/91	1A,1B,1C
	Met-L-Check FP-99A Penetrant (Type 1, Method A, Level 3)	PCIR 1594	05/20/91	1A,1B,1C
	Sherwin HM-2D (Type 1, Method A, Level 1)	PCIR 1629	01/29/93	1A
Glover Machine Company 210 S. Morocco St. Dallas, Texas 75211	Turco WP 170LS Penetrant (Type 1, Method A, Level 3) with Turco NAD Developer (Form D)	PCIR 1604	08/09/91	1A,1B,1C
Israel Aircraft Industries Ben Gurion International Airport Tel Aviv (Led), Israel	Magnaflux ZL-22D Penetrant (Type 1, Method D, Level 3) with Magnaflux ZR-10A Hydrophilic Emulsifier (20% Concentration) and Magnaflux ZP-4B Developer (or other Form A, Type 1 System)	PCIR 1402	07/05/88	1A,1B,1C
** Demonstrated Mr.Belkar Solomon Mr.Shaul Fruchtman	Magnaflux ZL-67 Penetrant (Type 1, Method A, Level 3) and Magnaflux ZP-4B Dry Developer {Form A)	PCIR 1696	9/14/95	1A
NDE, Inc. P.O. Box 121326 1189 Mercedes St. Benbrook, Texas 76121 (817) 249-4760	Sherwin RC-65 Penetrant (Type 1, Method D, Level 3) with Sherwin ER-83A Hydrophilic Emulsifier (30% Concentration) and Sherwin D-90G Developer (or other Form A, Type 1 System)	PCIR 1443	)3/31/89	1A,1B,1C

** Changes This Revision

Fort Worth Qualified Processors List

Processor	Penetrant Materials	Report Number	Date Approved	Zone
Pride Plating Co. Rt. 5 Box 74344 Grove, Oklahoma (918) 786-6111	Magnaflux ZL-67A Penetrant Magnaflux ZP-9F Non-Aqueous Developer	PCIR 1639	05/06/93	1A, 1B
	Magnaflux ZL-66A Penetrant Magnaflux ZP-9F Non-Aqueous Developer	PCIR 1639	05/06/93	1A, 1B
Quality Plating Co. 2665 N. Darlington Tulsa, Oklahoma 74115	Ardrox P6F-4 Penetrant (Type 1, Method A, Level 3) and Ardrox NQ1 Developer (or other Form D, Type 1 System)	PCIR 1640	05/21/93	1A, 1B
SABCA/Haren Chaussee De Haecht 1470 1130 Brussels Brussels, Belgium	Magnaflux ZL-56 Penetrant (Type 1, Method A, Level 4)	PCIR 1415	09/14/88	1A, 1B, 1C
	Ardrox P6F-4 Penetrant (Type 1, Method A, Level 3)	PCIR 1417	09/16/88	1A, 1B, 1C
SONACA Route Nationale 5 B-6200 Gosselies Belgium	Ardrox 970-P25 Penetrant (Type 1, Method A, Level 3)	PCIR 1413	08/29/88	1A, 1B, 1C
	Magnaflux ZL-56 Penetrant (Type 1, Method A, Level 4)	PCIR 1414	08/31/88	1A, 1B, 1C
Sullivan Precision Metal Finishing Co. 975B W. Highway 66 P.O. Box 515 Sullivan, Mo. 63080	Ardrox P6F-3 (or equivalent P-135E) Penetrant (Type 1, Method A, Level 3)	PCIR 1610	09/25/91	1A
TUSAS Aerospace Ind.Inc. (TAI) Akinci UCAK Fabrikasi Tesisler Ankara, Turkey	Magnaflux ZL-56 Penetrant (Type 1, Method A, Level 4)	PCIR 1465	06/07/89	1A, 1B, 1C
	Magnaflux ZL-66A Penetrant (Type 1, Method A, Level 3)	PCIR 1465	06/07/89	1A, 1B, 1C
	Ardrox P6F-3 (or equivalent P-135E) Penetrant (Type 1, Method A, Level 3)	PCIR 1465	06/07/89	1A, 1B, 1C

** Changes This Revision



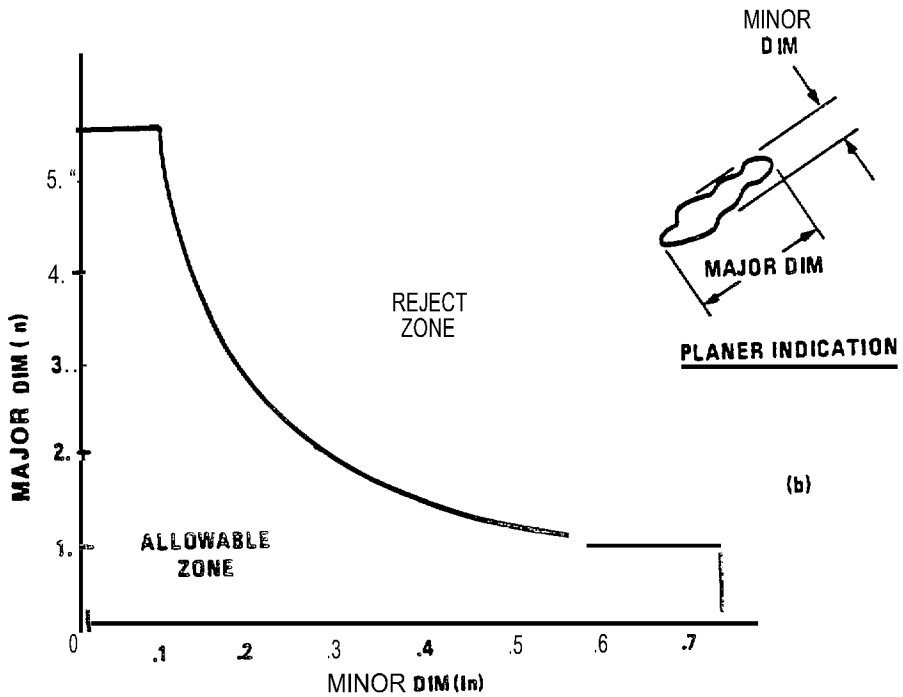


Figure 13 Nondestructive Inspection Accept/Reject Criteria

GENERAL DYNAMICS
Fort Worth Division
FSCM 81755

Amendment No. 3 To FPS-3560B
Dated: 12 March 1993
Superseding Amendment 2

AMENDMENT TO FPS-3560B, FATIGUE AND FRACTURE CONTROL AND MANUFACTURING SPECIFICATION FOR F-16 PART 16T7465 (SKIN, HORIZONTAL STABILIZER, ASSEMBLY OF)

Contract Number: F33657-88-C-0037

Leasability of this material under the Freedom of Information Act is subject to the restrictions on release in DoD Regulation 5400.7-R and DoD Directive 5230.25.

GENERAL DYNAMICS
Fort Worth Division
FSCM 81755

Amendment No. 3 To FPS-3560B
Dated: 12 March 1993
Superseding Amendment 2

This amendment incorporates and supersedes ail previous amendments. This amendment forms a part of and shall be attached to General Dynamics' Fort Worth Division Process Specification FPS-3560B, "FATIGUE AND FRACTURE CONTROL AND MANUFACTURING SPECIFICATIONS FOR F-1 6 PART 16T7465 (SKIN, HORIZONTAL STABILIZER, ASSEMBLY OF)," dated 7 June 1991. This amendment shall become effective immediately upon issue.

Paragraph

2.1 Change: Add O-T-620 111 -Trichloroethane, "Technical Inhibited (Methyl Chloroform)" to "Federal Documents" list of "Applicable Documents".

Reason: Incorporate materials referenced within specification in "Applicable Documents" section.

2.2 Change: Add "MIL-Hdbk-106 Multi-level Continuous Sampling Procedure and table for inspection attributes{' to "Military Documents" list.

Reason: Incorporate documents in specification into "Applicable Documents" section.

2.3 Change: Add "FMS-2004 - Cleaning Solvent, General Purpose" to list of "Procurement Specifications".

Reason: Incorporate low volatile content general purpose cleaning solvent.

2.3 Change: Add the following to "Standards" list of "Applicable Documents":
P5396 Cloth, Cleaning
P6019 Compound, Reinforced Plastic, Miscellaneous
P6176 Compound Release Agent
P6190 Adhesive Acrylic Tough High Peel Fast Curing

Reason: Add standards referenced in text to "Applicable Documents" section.

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Paragraph

3.2.4

Change: Add "3.2.4 Solvents" as follows:
3.2.4 SOLVENTS - Usage and disposal of solvents shall be per local regulations and approved SPI's (Safe Practice Instructions), DN's (Division Notices), PDI's (Production Departmental Instructions) and SP'S (Standard Practice) as applicable. Wipe solvents approved for general use unless otherwise noted in the processing steps of this specification shall include P6228 and FMS-2004. Material and Process Control and/or Material and Process Engineering shall be consulted if doubt exists in use of solvents for a particular application.

NOTE: Maximum cleaning efficiency when using FMS-2004 is obtained as follows:

(1) Wipe substrate with clean P5396 moistened with FMS-2004.

(2) Immediately wipe surface dry using clean, dry P5396

Reason: Incorporate new cleaning (low volatile content) solvent and procedure (ERM). Delete minimum drying time requirement.

3.11.5.1(2)

Change: Delete "they do not. . . affected area or" in the first sentence and replace "that meet acceptance criteria" in the second sentence with "that exceed".

Reason: Surface porosity/pits in glass surface ply are a cosmetic problem. GD/FW and DPRO personnel had previously agreed that 200 sq. in. was cosmetically acceptable. (Ref. REA ME92823).

3.11 .5.1(2)b.

Change: Delete "(vapor degreased)" from sentence.

Reason: This was an erroneous callout.

Paragraph

3.11.5.2 Change: Revise to read:

3.11.5.2.1 Surface 17 eDr-

3.11.5.2.1- Laminates with visually observable surface depressions on the bag surface (OML) that are:

(1) greater than 0.006 inch, but less than or equal to 0.010 inch in depth,
and
(2) less than or equal to 0.25 square inch in area (e.g. 0.5 inch x 0.5 inch)
shall be filled with FMS-0074 Type I as follows:

(a) Process per 3.1 1.5.1(2)(a) - (d)

(b) Using a brush or spatula, apply FMS-0074 Type I surfacer to fill depression. The FMS-0074 material should be 0.005-0.010 inch higher than the edge of the mating surfaces.

(c) Cure 2 hours (minimum) at room temperature followed by 4 hours (minimum) at 140-150°F.

(d) After cure, lightly sand using 180 grit or finer aluminum oxide abrasive cloth to fair-in FMS-0074 material flush with surrounding area.

(e) Remove sanding residue by wiping with clean cheesecloth moistened with M IL-C-38736 or approved solvent per 3.2.4.

(f) Dry at room temperature.

Laminates with surface depressions that are:

(1) greater than 0.010 inch in depth,
or
(2) greater than 0.006 inch in depth and greater than 0.25 square inch in area (e.g. 0.5 inch x 0.5 inch or 0.6 inch in diameter) shall be rejected.

3.11.5.2.2- Laminates with visually observable surface depressions on the tool surface (I ML) that are greater than 0.010 inch in depth shall be rejected.

NOTE: Acceptable surface depressions on either the OML or IML may be filled at the discretion of manufacturing if deemed necessary to provide acceptable cosmetics. If cosmetic discrepancies occur in areas having peel ply, the affected local area of peel ply maybe removed@ allow visual evaluation of the part surface. The laminate shall be marked to indicate "peel ply removed in this area".

Reason: Revise criteria for rejection of laminate due to surface depressions.

Paragraph

3.11 .5.3.3 Change: Revise to read:
Edge Delamination - Acceptable edge delamination shall be after cure processed by the following:

(a) Permissible edge delamination shall be sealed in accordance with the following directions.

1. Smooth rough edges with 200 to 320 grit aluminum oxide abrasive cloth.
2. Clean damaged area with clean cheesecloth moistened with trichloroethane.
3. Let the area dry for 5 to 10 minutes.
4. t-feat repair area of part to 150 to 160° F and maintain temperature during resin application.
5. Mix adequate amount of FMS-1 104 Form I epoxy resin and curing agent in specified proportions. Working life of mixture is approximately 30 minutes.
6. Paint and/or inject the resin using a syringe into the delaminated region(s) until resin thoroughly infiltrates damage and flows from the edge.
7. Remove excess resin from the repair area using a dry cheesecloth.
8. Apply contact pressure with a small pressure plate coated with P61 09-4, or a suitable P6176 release, secured with C-clamps.
9. Set resin at room temperature at least 2 hours while maintaining contact pressure.
10. Cure resin at room temperature and pressure for 24 hours. An alternate cure of 2 hours at room temperature plus 1 hour at 180 ± 5° F. while maintaining pressure is allowable.
11. After cure is complete and laminate has cooled to room temperature, remove any tape and pressure application materials from the repair area.
12. Lightly sand repaired area using 200 to 320 grit aluminum oxide abrasive cloth to remove excess resin and smooth out the edges.
13. Seal edge of repair with P601 9-5 sealant resin.

Reason: Incorporate Previous Amendment

Paragraph

4.4.3.2 Change: Rewrite second and third sentence to read:
"Each laminate shall be free of blisters, wrinkles, and folds in the FMS-2023 material. Wrinkles or folds in the barrier material are acceptable provided they do not exceed 0.010 inch in height or depth."

Reason: Add fold criteria and clarify allowable wrinkle.

4.4.3.4 Change: Revise to read:
Edge Delaminations - Each laminate shall be visually inspected for edge delamination, after all trimming and machining operations have been completed. Edge delamination are herein defined as a separation between two or more plies at the edge of the laminate. The size of any visually detected delamination shall be determined with ultrasonics per the applicable NDTS-5103 document and approved technique data sheets. Edge delamination shall be evaluated as follows:

(a) an edge delamination that extends more than 0.25" into the part is unacceptable, and

(b) edge delamination(s) that extend(s) less than 0.25" into the part and with a cumulative length exceeding 30% of the edge is unacceptable, and

(c) acceptable edge delamination (extends less than 0.25" into the part and within the bounds for maximum cumulative length) shall be sealed in accordance with section 3.11.5.3.3.

Reason: Incorporate Previous Amendment

4.4.3.6 Change: Revise subparagraph "Initial Quality Around Machined Fastener Holes" to read as follows:

Initial Quality Around Machined Fastener Holes - Each fastener hole shall be visually inspected on the entrance and exit surfaces for indications of delamination damage. Indications of possible unacceptable delamination include conically shaped "punch-thru" damage to structural plies on the exit side of the hole in excess of the acceptance criteria specified in subparagraph (a). Apparent delamination damage shall be confirmed via inspection with ultrasonics according to the applicable NDTS-5103 technique and corresponding approved Technique Data Sheets. Accept/reject criteria for delamination(s) around drilled, reamed, and countersunk holes are defined in Figure 11. Specific fastener types are referenced in Figure 11 for general information only, i.e. not all fastener types used during the manufacture of 16T7462 are specified. Delamination(s) around a fastener hole is not acceptable except when the requirements in both subparagraphs (a) and (b) are satisfied.

Paragraph

4.4.3.6 (Cont.) (a) The maximum dimension of a delamination is contained on or within a region formed by a radius extending 1.25 times the hole diameter, measured from the center as defined in Figure 11,

or

The maximum dimension of a delamination is contained on or within a region formed by a radius extending 1.5 times the hole diameter measured from the center as defined in Figure 11 provided that not more than 10% of the same diameter holes in one part are affected, and no more than 3 adjacent holes are affected.

(b) Delamination does not extend between two holes, or between a hole and an edge.

Reason: Correct oversight in coverage of paragraph.

4.4.3.6.1 Change: Revise to read as follows:
Fastener Removal and Replacement -

Fasteners Requiring Removal and Replacement at Next Assembly (16T7462).

(a) The location of each fastener that is removed and replaced (R&R) in an assembly shall be noted on a sketch similar to that shown in Figures 12a and 12b for submission to NDI. The laminate is divided into two zones based on critical bolt-bearing margins-of-safety for inspection purposes,

(b) Fastener hole locations for Zones 1 and II are defined for both the pre-Block 40, Block 40, and Block 50 horizontal empennage configurations as shown in Figures 12a and 12b.

Reason: Incorporate Previous Amendment

4.4.3.6.2 Change: Revise to read as follows:

Inspection for Replacement Fasteners - Fastener hole locations subject to a fastener R & R operation shall be inspected per the applicable NDTS-5103 and corresponding approved Technique Data Sheet for delamination created during the fastener replacement process and to assure compliance with the maximum allowable delamination sizes defined in Figure 14 and the following subparagraphs describing Zone I and Zone II inspection and quality requirements.

(a) ZONE I - The accept/reject criteria defined in Figure 14 shall be used to define the maximum allowable dimensions around a delaminated hole after a fastener R&R operation, when the following conditions are satisfied.

Paragraph

4.4.3.6.2 (Cont.)

1. A maximum of two adjacent holes in the Spanwise (inboard-outboard) direction with delamination damage is allowed.

2. ONLY APPLICABLE IN THE PIVOT FITTING AREA - A maximum of two adjacent fastener hole locations in the chordwise (fwd-aft) direction (defined in Figure 12a and 12b) with delamination damage is allowed.

3. ONLY APPLICABLE IN THE PIVOT FITTING AREA - A maximum of three 0.375" dia. fasteners subject to a R&R operation that creates delamination damage is allowed.

4. Hole-to-hole and hole-to-edge delamination is not allowable.

(b) ZONE II - The accept/reject criteria defined in Figure 14 shall be used to define the maximum allowable dimensions around a delaminated hole after a fastener R&R operation, when the following conditions are satisfied:

1. A maximum of three adjacent delaminated holes in the spanwise (inboard-outboard) direction is allowed.

2. A minimum of four undamaged fastener holes is required between a damaged fastener hole or a set of damaged holes in the spanwise direction.

3. Hole-to-hole and hole-to-edge delamination is unallowable.

Additional Notes:

(1) Inspection may be accomplished prior to installation of the new fastener. Avoid contamination of open fastener holes with couplant by using "Ultragel" couplant, plugs in holes, etc.

(2) Assemblies may be sampled for ultrasonic inspection in accordance with the following ground rules:

(a) Sampling procedure: MIL-Handbook H-106, dated 31 October, 1958.

(b) Under MIL-Handbook H-106 procedures, AOQL = 3.0, f =1/2 and k = 4 shall be used. The plan shall be truncated such that the maximum number of assemblies which may be passed without inspection is equal to 2/f-1; where "f" is the sampling rate at any level.

Paragraph

4.4.3.6.2 (Cont.) (c) Sampling size shall be the total number of assemblies to be produced.

Reason: Incorporate Previous Amendment

4.5.1 Change: Replace 'and shall become pari of the related NDTS's." with "and shall be retained and available for reference-"

Reason: TDS's do not need to remain with the NDTS's.

4.5.1.1 Change: Replace 4.5.1.1 with:
4.5.1.1 Inspection and Evaluation - Each laminate shall be ultrasonically inspected over 100% of its surface area for anomalous indications that may be characteristic of internal planar (i.e., oriented parallel to surface of laminate) voids, delamination, and foreign material. The laminate shall be inspected using the procedures outlined in the applicable NDTS-5 103 document with the corresponding CM&PT approved TDS sheet. Ultrasonic inspection data, such as db setting and transducer frequency, pertinent to the inspection of a specific laminate, the part number (basic and dash), part serial number, and the date of inspection, shall be recorded on the C-Scan. If a paper C-Scan has been produced, attach the C-Scan to the SOIR. If an electronic C-Scan has been produced, file/store the C-Scan per Quality Assurance storage and retrieval procedures.

Reason: To allow electronic archiving of C-Scans to reduce paperwork and cost.

Figure 11 Change: Revise Figure 11.

Reason: Incorporate Previous Amendment

Figure 12 Change: Replace Figure 12 with updated Figures 12a and 12b.

Reason: Incorporate Previous Amendment

Figure 14 Change: Added Figure 14.

Reason: Incorporate Previous Amendment

Written by:

K. R. Yawn
Senior Engineer
Composite Materials
and Processes Engineering

Approved by:

E. L. McKague, Jr.
Chief
Composite Materials
and Processes Engineering

FASTENER HOLE DELAMINATION ACCEPT/REJECT CRITERIA

NOMINAL FASTENER SIZE	TYPICAL FASTENER TYPE	NOM. HOLE DIA. (in)	HEAD DIA. (in)	MAX ALLOWABLE DELAMINATION SIZE (in)			
				1.25D (1)	1.50D (1)	1.25D(2)	1.50D(2)
5/32	NAS1921-05	0.156	0.286	0.19	0.23	0.12	0.15
	MS21 140-05	0.165	0.334	0.21	0.25	0.12	0.16
3/1 6"	MS21140-06	0.200	0.387	0.25	0.30	0.15	0.20
1/4"	NAS1921 -08	0.250	0.476	0.31	0.37	0.19	0.25
	MS21140-08	0.261	0.508	0.33	0.39	0.20	0.26
5/16'	MS2114O-10	0.314	0,635	0.39	0.47	0.24	0.31
	MS21141-10	0.314	0.522	0.39	0.47	0.24	0.31
3/8"	MS21140-12	0.375	0.763	0.47	0.56	0.28	0.37
	MS21141-12	0.375	0.627	0.47	0.56	0.28	0.37

NOTES:
(1) Maximum Delamination Dimension Measured From The Center Of The Hole.
(2) Maximum Delamination Dimension Measured From The Edge Of The Hole.

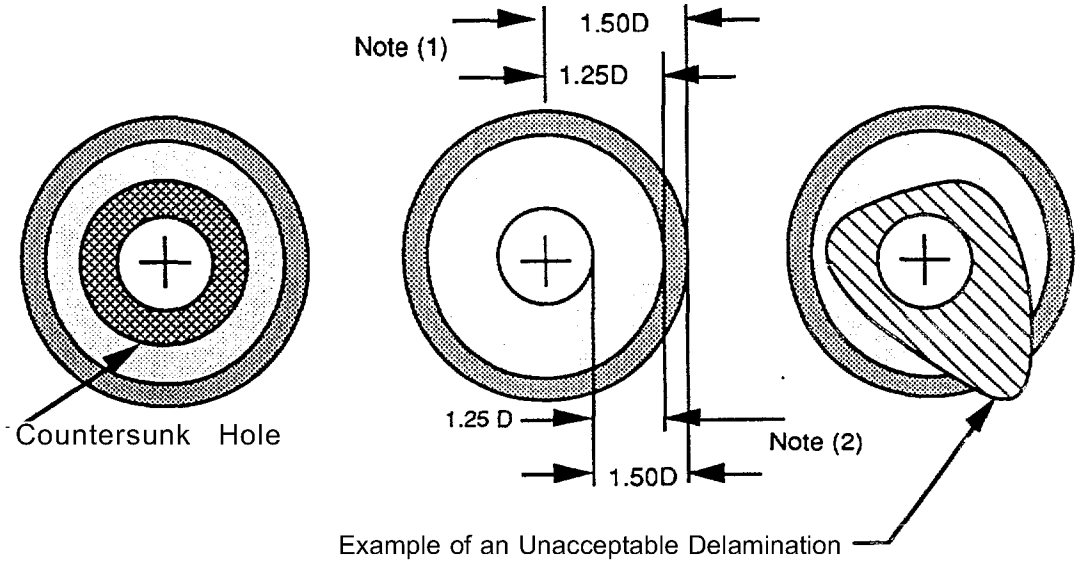


Figure 11 Accept/Reject Criteria For Delaminated Fastener Holes

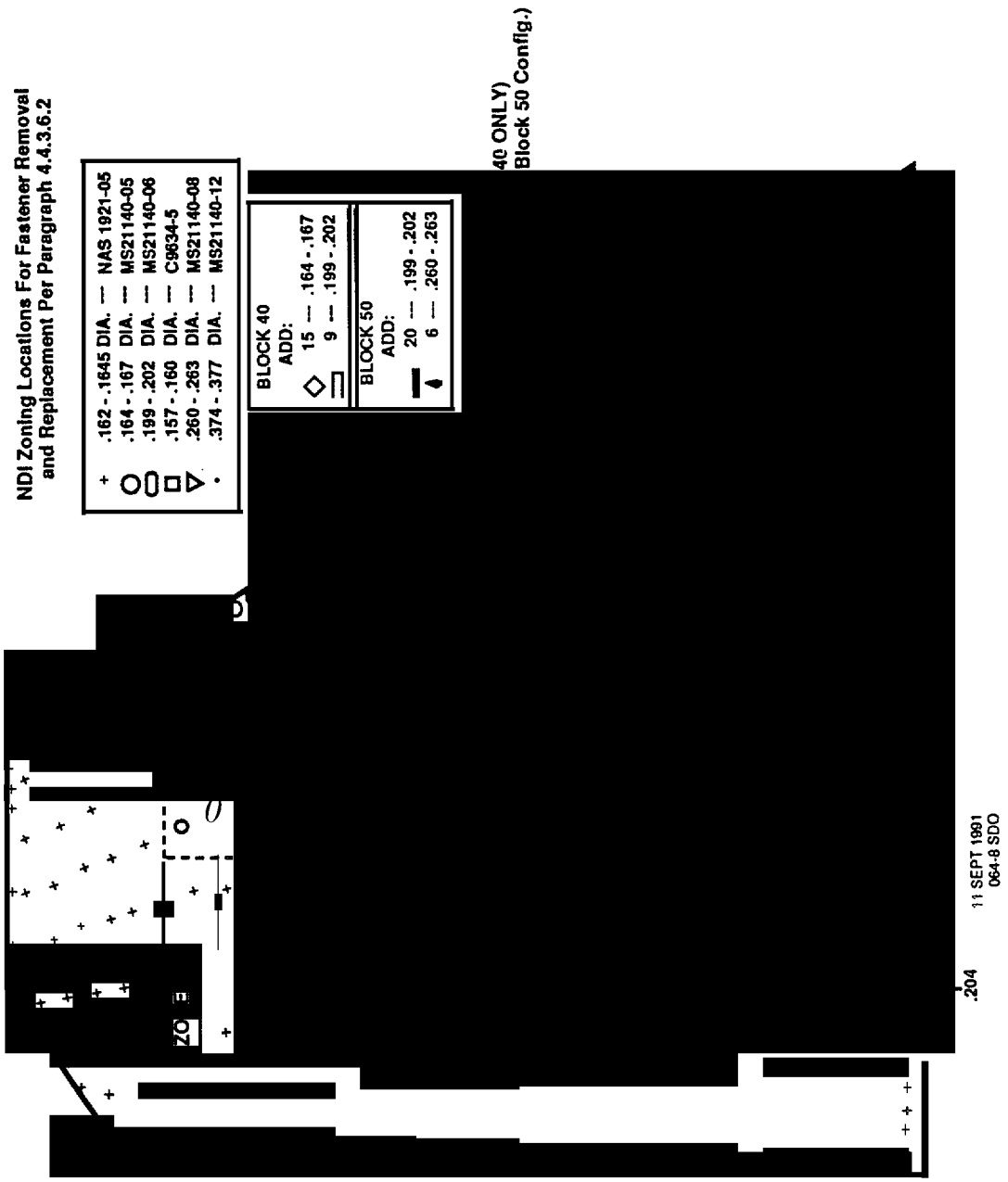
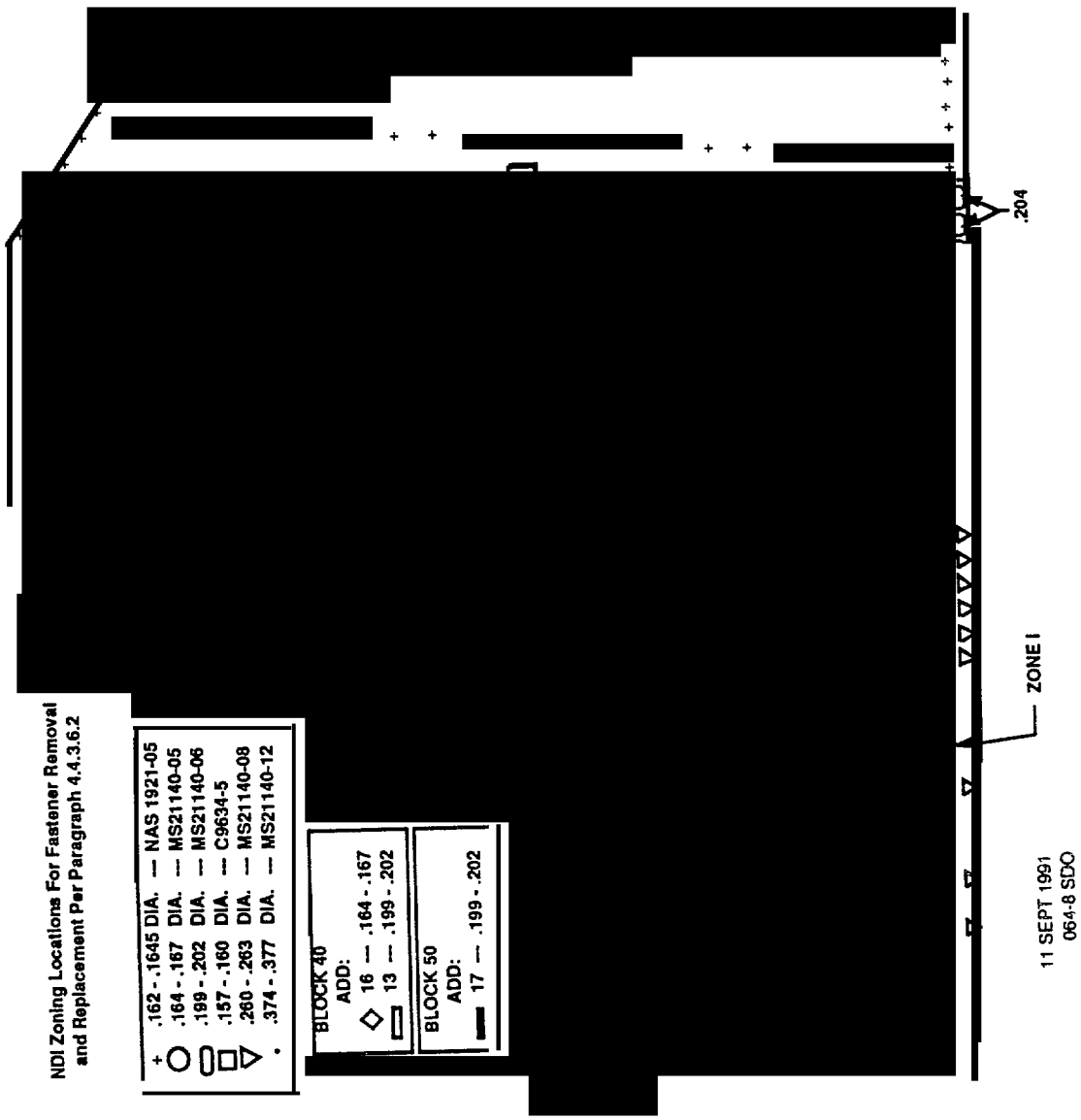


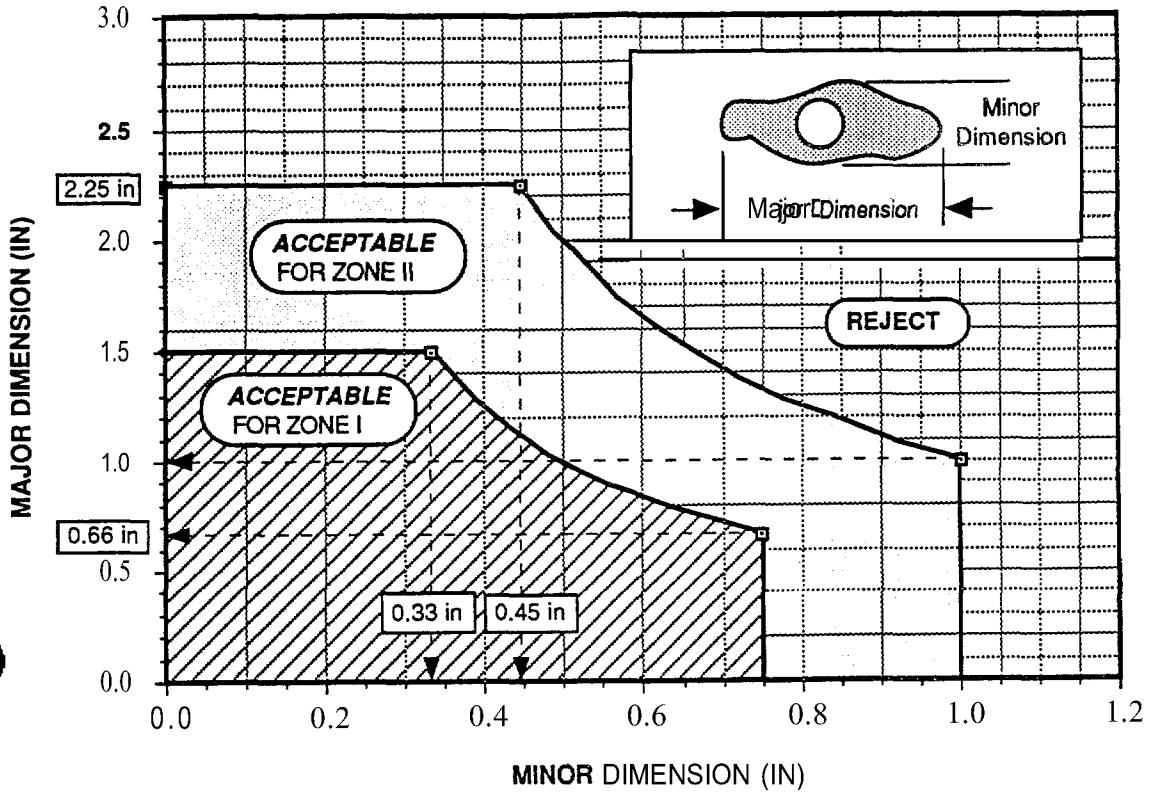
Figure 12a - Zoning Locations For The 16T7462 (-3) Horizontal Empennage Skin



Skin

Figure 12b - Zoning Locations For The 16T7462 (-4) Horizontal Empennage

NOTE: Refer to Figures 12a and 12b For Zone I and Zone II Fastener Locations



For SURFACE Delamination Measured From the Laminate Surface:
(1) Less Than OR Equal To 0.016 inches (Without Peel-ply) or
(2) Less Than OR Equal To 0.022 inches (With Peel-ply) USE The ZONE I Acceptance Curve.

ZONE I AND ZONE II is applicable for delamination at all other depths.

Figure 14- Acceptance and Rejection Inspection Criteria For Fasteners Subjected To A Remove and Replace Operation Per Paragraph 4.4.3.6.2