



AS9102 FAI Report Guideline

FAI_STD-001 Rev. L 03/16/2020

FAI STD-001

Applies to all LMI locations and Suppliers

Review Appendix A
for additional Customer (OEM)
requirements

Objective of the FAI Guideline

Provide objective evidence of compliance to **AS9102Rev B** and customer requirements.

Strive for a more consistent FAI process across all LMI facilities and their Suppliers

Reduce questions and confusion relative to completing FAI documentation.

Eliminate Customer rejections/returns of FAI packages.

Standard FAI Guidelines - General Notes

The most basic guide for the completion of a FAIR is:

“COMPLIANCE” and “TRACEABILITY”

The FAIR shall provide proof of compliance and traceability to the specific Standardized and Customer requirements for the product.

Do not combine detail-part requirements and assembly requirements on one FAIR, even if it is manufactured per the same build package. (see exception)

Detail-Part FAIs and Assembly FAIRs must be completed independently, with their own complete individual FAI package. (see exception)

Exception: A scenario may exist whereas the engineering does not define the manufactured detail-part as an unique part/dash number, separate from the assembly. The engineering defines the detail-part and the installation of a component (such as a bushing or bearing) as one part/dash number; whereas the actual deliverable product is an assembly.

In this case, a single FAIR may be produced to encompass the complete process.

Standard FAI Guidelines - General Notes (continued)

For LMI Aerospace facilities and their Suppliers: Each FAIR package shall be submitted to LMI through Net-Inspect; this includes the Sub-Assembly and/or Detail Level FAIRs of an Assembly FAIR.

It is **no longer** acceptable to only complete the Net Inspect Form 1, in its entirety, and then upload (attach) the **complete** “hardcopy” FAIR package (FAI Forms 1, 2, 3, certs, engineering, supporting documentation, etc. . .) into Net-Inspect. The FAIR must be completed entirely inside of Net – Inspect.

Note: It is **REQUIRED** to upload documents in pdf format, since it is the most accommodating format, and less subject to unintentional editing by other personnel. An Excel format is no longer acceptable.

Standard FAI Guidelines - General Notes (continued)

Per AS9102 Section 4.6 Partial or Re-accomplishment of First Article Inspection

- a. The FAI requirement, once invoked, shall continue to apply even after initial compliance.
- b. The FAI requirements may be satisfied by a partial FAI that addresses only the changes from a baseline part number provided all other characteristics were conforming on the previous FAI and are produced by the original production processes.
- c. When a partial FAI is performed, the organization shall, as a minimum, complete the affected fields in the FAI forms.
- d. When the organization performs a partial FAI, the organization shall record the “Baseline Part Number”, including the revision level and reason for the partial FAI on Form 1 (see field 14).
- e. FAI requirements may be satisfied by a previously approved FAI performed on identical characteristics of similar parts produced by identical means. When FAI requirements (partial or full) are satisfied in this manner, identify the “Baseline Part Number” on Form 1 (see field 14).

Standard FAI Guidelines - General Notes (continued)

AS9102 Section 4.6 Partial or Re-accomplishment of First Article Inspection (continued)

f. The organization shall perform a full FAI or a partial FAI for affected characteristics, when any of the following occurs:

1. A change in the design characteristics affecting fit, form, or function of the part.
2. A change in manufacturing source(s), process(es), inspection method(s), location of manufacture, tooling, or materials that can potentially affect fit, form, or function.
3. A change in numerical control program or translation to another media that can potentially affect fit, form, or function.
4. A natural or man-made event, which may adversely affect the manufacturing process.
5. An implementation of corrective action required to complete a previous FAI, as described in 4.4.
6. A lapse in production for two years shall require an update **for any characteristics that may be impacted by the inactivity**. This lapse is from the completion of last production operation to the actual restart of production.

(See customer requirements for deviations to this standard)

AS9102 FAI Guideline - Form 1

First Steps for Initiating a FAIR in Net Inspect [this page is not applicable to std. AS9102 form]

Customer: Select the customer from a drop-down list.

LMI: See Page 9 for instructions relative to LMI's internal FAI Reports being generated for Customers that do not receive FAIRs via Net Inspect.

LMI facilities – select the appropriate LMI customer **Suppliers** – The customer selection is based on the location of the LMI facility that the product will be delivered to (LMI name and address on the PO).

Note: For “Drop Ship” locations, the LMI facility authorizing the “Drop Ship” is the customer.

[See Page 10 for Guide on the LMI Purchase Order information]

Program Box: Select the appropriate program from the drop-down selection. If the correct program is unknown and/or unattainable, **No Program Assigned** is acceptable to select.

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1: Part Number Accountability

1. Part Number: 73P5731111S001		2. Part Name: Synthetic Test Part		3. Serial Number: N/A		4. FAIR Number: 5439	
5. Part Revision Level: A		6. Drawing Number: 73P5731111S001 -- A.CATPart		7. Drawing Revision Level: A		8. Additional Changes: LSCP Rev A; TSSP-01	
9. Manufacturing Process Reference: 12345609-0001 (L01)		10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES		11. Supplier Code: V000049037		12. P.O. Number: 410000/001	
13. Detail FAI: <input checked="" type="checkbox"/> Assembly FAI: <input type="checkbox"/>		14. Full FAI: <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> <i>Baseline Part Number (Including Revision Level)</i>					
		Reason for Partial:				AOG <input type="checkbox"/> FAA Approved <input type="checkbox"/>	
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "INDEX" section below.							
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.							
15. Part Number	16. Part Name	17. Part Serial Number	Supplier	18. FAIR Number			
1) Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition. 2) Also indicate if the FAI is complete per Section 4.4:							
Customer LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES				Program NO PROGRAM ASSIGNED			
From Division - To Division -							
FAI Complete <input type="radio"/> FAI Not Complete <input checked="" type="radio"/>							
19. Signature				20. Date			
21. Reviewed By				22. Date			
23. Customer Approval				24. Date			

AS9102 FAI Guideline - Form 1

[This Slide is for LMI Internal Net Inspect Use Only]

Initiating a FAIR in Net Inspect when the LMI Customer Does Not Utilize Net Inspect

Customer: Select your (LMI) facility as the customer.

Program Box: Select the appropriate Customer's name from the drop-down section.

If the customer's name doesn't appear in the drop-down, contact your facility's Net Inspect Administrator. The Administrator can add the customer's name to the Program selection field, to make it available.

The Administrator must reset users' Program access by opening the user's file, selecting All Programs, then selecting Submit, at the bottom of the panel.

NOTE: Upon completion of the FAIR, perform the following step:

Select "Print"

Select "Download PDF"

Select "Desktop" and Save

Submit the PDF format of the FAIR to the Customer

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1: Part Number Accountability

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5. Part Revision Level: A	6. Drawing Number: 73P5731111S001 - A.CATPart	7. Drawing Revision Level: A	8. Additional Changes: LSCP Rev A; TSPP-01	
9. Manufacturing Process Reference: 12345609-0001 (L01)	10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	11. Supplier Code: V000049037	12. P.O. Number: 410000/001	
13. Detail FAI: <input checked="" type="checkbox"/> Assembly FAI: <input type="checkbox"/>	14. Full FAI: <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> Baseline Part Number (Including Revision Level) Reason for Partial:		AOG <input type="checkbox"/> FAA Approved <input type="checkbox"/>	
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "INDEX" section below.				
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.				
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1) Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition. 2) Also indicate if the FAI is complete per Section 4.4:				
Customer LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES		Program NO PROGRAM ASSIGNED		
From Division - To Division -				
FAI Complete <input type="radio"/> FAI Not Complete <input checked="" type="radio"/>				
19. Signature		20. Date		
21. Reviewed By		22. Date		
23. Customer Approval		24. Date		

Guide on LMI Purchase Order Information

Supplier Code Number

Customer Location

PO Line Item

PO Number

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                                PURCHASE ORDER
Bill : LMI Aerospace
      P.O. Box 940
      St. Charles, MO 63302-0940
Vendor: LMI WASHINGTON
      6325 AVANTHA DRIVE
      WASHINGTON          MO 63090
      DADU10
Attn :
Route :
Buyer :
PO No. & Item # must be referenced on Packing List & Invoice
Item# Description                      Qty  U/M  Unit Price  Ext. Amount
-----
001   BRACKET, MOUNTING
002E

                                Ship to : LMI SAVANNAH
                                           101 COLEMAN BLVD.  UNIT E
                                           SAVANNAH          GA 31408
Page : 1
PO No : A11111
Change :
Date :

***   ***   ***   ***   CONDITION OF SUPPLY   ***   ***   ***   ***
I. ENGINEERING DATA LIST (I.E. TECHNICAL DATA PACKAGE):

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AS9102 FAI Guideline - Form 1

Guide for Box 1, and Box 9 for LMI “Synthetic Part Numbers”

Box 1: Part Number

Part Number of the Detail, Assembly or Kit per PO line item. NOTE: Do not enter a LMI “Synthetic Part Number”, in this field.

“**Synthetic Part Number**”: This encompasses an engineering part number having either a prefix or suffix added to it, to provide an LMI-internal level of identification at the manufacturing site.

Box 9: Manufacturing Process Reference: The work order number (release/work order number or router number) shall be entered here.

When a LMI “Synthetic Part Number” exists, either the “Synthetic” suffix or the complete “Synthetic Part Number” shall also be included in this box.

Examples:

12345609-0001 (L01) or

12345609-0001/73P5731111S001L01

Form 1: Part Number Accountability

1. Part Number: 73P5731111S001	2. Part Name: Synthetic Test Part
5. Part Revision Level: A	6. Drawing Number: 73P5731111S001 -- A.CATPart
9. Manufacturing Process Reference: 12345609-0001 (L01)	10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES

AS9102 FAI Guideline - Form 1

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1: Part Number Accountability

Box 2: Part Name

Name of the Part as shown on the Drawing or PO line item.

Box 3: Serial Number

Serial Number of the part, as assigned by the Customer or Organization if applicable.

NOTE: "N/A" if not applicable.

Box 4: FAIR Number

Unique FAI Report Number required on all forms in Box 4 (This is auto-generated in Net Inspect)

1. Part Number: 73P5731111S001	2. Part Name: Synthetic Test Part	3. Serial Number: N/A	4. FAIR Number: 5439	
5. Part Revision Level: A	6. Drawing Number: 73P5731111S001 -- A.CATPart	7. Drawing Revision Level: A	8. Additional Changes: LSCP Rev A; TSSP-01	
9. Manufacturing Process Reference: 12345609-0001 (L01)	10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	11. Supplier Code: V000049037	12. P.O. Number: 410000/001	
13. Detail FAI: <input checked="" type="checkbox"/> Assembly FAI: <input type="checkbox"/>	14. Full FAI: <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> Baseline Part Number (Including Revision Level)			
	Reason for Partial:		AOG <input type="checkbox"/> FAA Approved <input type="checkbox"/>	
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "INDEX" section below.				
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.				
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Customer LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES		Program NO PROGRAM ASSIGNED		
From Division - To Division -				
FAI Complete <input type="radio"/> FAI Not Complete <input checked="" type="radio"/>				
19. Signature		20. Date		
21. Reviewed By		22. Date		
23. Customer Approval		24. Date		

AS9102 FAI Guideline - Form 1 (continued)

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Box 5: Part Revision Level

Parts List Revision – Revision should be recorded as listed on Engineering Parts List. (See Appendix for specific Customer Requirements)

Box 6: Drawing Number

Record the basic drawing number and/or the authority dataset file name associated with the FAI part. If a LMI LSCP is not provided with the build package, include base drawings (part and spray dot), any build-to standard drawing(s), DL, MPL, etc. (list all that apply).

Box 7: Drawing Revision Level

Record drawing sheet number and revision, authority dataset revision level, engineering doc revisions, etc. List all that apply, per entries in Box 6.

Box 8: Additional Changes

Record supplemental Engineering documents or Condition of Supply documents, and their revisions, that are incorporated into the product but not reflected in referenced Drawing/Part Revision level (e.g. LSCP, TSSP, E.O., etc...).

Form 1: Part Number Accountability

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5. Part Revision Level: A	6. Drawing Number: 73P573111S001 -- A.CATPart	7. Drawing Revision Level: A	8. Additional Changes: LSCP Rev A; TSSP-01	
9. Manufacturing Process Reference: 12345609-0001 (L01)	10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	11. Supplier Code: V000049037	12. P.O. Number: 410000/001	
13. Detail FAI: <input checked="" type="checkbox"/> Assembly FAI: <input type="checkbox"/>	14. Full FAI: <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> <i>Baseline Part Number (Including Revision Level)</i>		Reason for Partial: AOG <input type="checkbox"/> FAA Approved <input type="checkbox"/>	
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "INDEX" section below.				
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.				
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Customer LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES		Program NO PROGRAM ASSIGNED		
From Division - To Division -				
FAI Complete <input type="radio"/> FAI Not Complete <input checked="" type="radio"/>				
19. Signature		20. Date		
21. Reviewed By		22. Date		
23. Customer Approval		24. Date		

AS9102 FAI Guideline - Form 1 (continued)

Box 9: Manufacturing Process Reference: The work order number (release/work order number or router number) shall be entered here. See slide 11 for LMI “Synthetic” Part Numbers.

Box 10: Organization Name

Name of company/organization performing the FAI.

Note: Net Inspect auto-populates this field

Box 11: Supplier Code

Supplier Code is a unique number assigned by the Customer. It is sometimes referred to as Vendor Code, Vendor Identification Number, Supplier Number, etc.

LMI assigns a 6-character Supplier Code to their suppliers; which can be seen on the LMI PO, below the supplier name and address.

Box 12: P.O. Number

Customer Purchase Order (P.O.) number, P.O. Line Item number, Change number (if other than “ORIG”), and Contract Number (if applicable).

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Form 1: Part Number Accountability

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5. Part Revision Level: A	6. Drawing Number: 73P5731111S001 -- A.CATPart	7. Drawing Revision Level: A	8. Additional Changes: LSCP Rev A; TSSP-01	
9. Manufacturing Process Reference: 12345609-0001 (L01)	10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	11. Supplier Code: V000049037	12. P.O. Number: 410000/001	
13. Detail FAI: <input checked="" type="checkbox"/> Assembly FAI: <input type="checkbox"/>	14. Full FAI: <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> <i>Baseline Part Number (Including Revision Level)</i>			
Reason for Partial:		AOG <input type="checkbox"/> FAA Approved <input type="checkbox"/>		
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "INDEX" section below.				
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.				
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1) Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition. 2) Also indicate if the FAI is complete per Section 4.4:				
Customer LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES		Program NO PROGRAM ASSIGNED		
From Division - To Division -				
FAI Complete <input type="radio"/> FAI Not Complete <input checked="" type="radio"/>				
19. Signature		20. Date		
21. Reviewed By		22. Date		
23. Customer Approval		24. Date		

AS9102 FAI Guideline - Form 1 (continued)

Box 13: Detail Part or Assembly FAI: Check as appropriate

Box 14: Full FAI or Partial FAI: Check as applicable

Baseline Part Number Including Revision Level

For a partial FAI list the previous FAI Part number and its revision. When completing a Partial (Delta)FAI, the Baseline Part Number and Revision Level **MUST** be filled in for previously accepted FAI.

List the reason for the Partial FAI

BOX 15, 16, 17, 18

These sections are required ONLY if Assembly FAI is checked in Field 13. **NOTE:** Net-Inspect will not allow You to enter anything in these boxes if *Detail FAI* is checked.

[See next slide for the entry of “Hardware/COTS”]

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1: Part Number Accountability

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5. Part Revision Level: A	6. Drawing Number: 73P5731111S001 -- A.CATPart	7. Drawing Revision Level: A	8. Additional Changes: LSCP Rev A; TSSP-01	
9. Manufacturing Process Reference: 12345609-0001 (L01)	10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	11. Supplier Code: V000049037	12. P.O. Number: 410000/001	
13. Detail FAI: <input checked="" type="checkbox"/> Assembly FAI: <input type="checkbox"/>	14. Full FAI: <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> <i>Baseline Part Number (Including Revision Level)</i>		Reason for Partial: AOG <input type="checkbox"/> FAA Approved <input type="checkbox"/>	
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "INDEX" section below.				
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.				
15. Part Number	16. Part Name	17. Part Serial Number	Supplier	18. FAIR Number
1) Signature indicates that all characteristics are accounted for: meet drawing requirements or are properly documented for disposition. 2) Also indicate if the FAI is complete per Section 4.4:				
Customer LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES		Program NO PROGRAM ASSIGNED		
From Division - To Division -				
FAI Complete <input type="radio"/> FAI Not Complete <input checked="" type="radio"/>				
19. Signature		20. Date		
21. Reviewed By		22. Date		
23. Customer Approval		24. Date		

AS9102 FAI Guideline - Form 1 (continued)

Guide to Itemizing Unmodified Standard

Catalog Items/COTS (see next slide for example)

Box 15: Part Number: Enter the part number, along with the Lot number or the Control Number.

If the item doesn't have either a Lot or Control number, provide an associated traceable number to the item (CofC #, Shipper #, Bill of Lading #, etc...)

Examples:

NAS6204-4/Lot#84547

NAS6204-4/Ctrl#2017C36515

Note: The standard AS9102 "hardcopy" Form 1, does not provide a place to enter the supplier name. Place the supplier name in column 15, in parenthesis, after the part number and lot/control number info.

Box 16: Part Name: Enter name of item

Box 17: Part Serial Number: If the item has a manufacturer S/N, enter that number; otherwise, enter N/A.

Supplier (Net Inspect, only) : Enter the Supplier name

Box 18: FAIR Number: Enter N/A

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1: Part Number Accountability

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5. Part Revision Level: A	6. Drawing Number: 73P5731111S001 -- A.CATPart	7. Drawing Revision Level: A	8. Additional Changes: LSCP Rev A; TSSP-01	
9. Manufacturing Process Reference: 12345609-0001 (L01)	10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	11. Supplier Code: V000049037	12. P.O. Number: 410000/001	
13. Detail FAI: <input checked="" type="checkbox"/> Assembly FAI: <input type="checkbox"/>	14. Full FAI: <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> <i>Baseline Part Number (Including Revision Level)</i> Reason for Partial: _____ AOG <input type="checkbox"/> _____ FAA Approved <input type="checkbox"/>			
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "INDEX" section below.				
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.				
15. Part Number	16. Part Name	17. Part Serial Number	Supplier	18. FAIR Number
1) Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition. 2) Also indicate if the FAI is complete per Section 4.4:				
Customer LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES		Program NO PROGRAM ASSIGNED		
From Division - To Division -				
FAI Complete <input type="radio"/> FAI Not Complete <input checked="" type="radio"/>				
19. Signature		20. Date		
21. Reviewed By		22. Date		
23. Customer Approval		24. Date		

AS9102 FAI Guideline - Form 1 (continued)

Guide to Itemizing Unmodified Standard Catalog Items/COTS

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1: Part Number Accountability

Example of entering the Standard catalog items and/or COTS
Note: Net Inspect does not recognize the symbol “#”.

1. Part Number: 312A3123-12	2. Part Name: Test Part	3. Serial Number: N/A	4. FAIR Number: 5298	
5. Part Revision Level: A	6. Drawing Number: 312A3123	7. Drawing Revision Level: A	8. Additional Changes: LSCP/RevA	
9. Manufacturing Process Reference: 123456-0001	10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	11. Supplier Code: JIST07	12. P.O. Number: A11111/001	
13. Detail FAI: <input type="checkbox"/> Assembly FAI: <input checked="" type="checkbox"/>	14. Full FAI: <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> <i>Baseline Part Number (Including Revision Level)</i>		Reason for Partial: AOG <input type="checkbox"/> FAA Approved <input type="checkbox"/>	
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "INDEX" section below.				
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.				
15. Part Number	16. Part Name	17. Part Serial Number	Supplier	18. FAIR Number:
NAS6204-06/Lot84547	Rivet	N/A	Aero Fastener Co., 76 Servistar Ind. Way, Westfield, MA 01086	N/A
NAS1605-05/Ctrl2017C36515	Rivet	N/A	KLX 88289 Expedite Way, Chicago, IL 60695	N/A
1) Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition. 2) Also indicate if the FAI is complete per Section 4.4:				

AS9102 FAI Guideline - Form 1 (continued)

Box 19, 20, 21, and 22

Net-Inspect will automatically fill in these boxes when you sign and submit the FAI to the customer. The **Signature** and **Reviewed by** signature fields should be completed by two different individuals. These must be completed in order for Net Inspect to activate the Customer approval fields.

Box 23 and 24

These boxes will remain open until the customer approves and signs the FAI electronically on their end.

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1: Part Number Accountability

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5. Part Revision Level: A	6. Drawing Number: 73P5731111S001 -- A.CATPart	7. Drawing Revision Level: A	8. Additional Changes: LSCP Rev A; TSSP-01	
9. Manufacturing Process Reference: 12345609-0001 (L01)	10. Organization Name: LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	11. Supplier Code: V000049037	12. P.O. Number: 410000/001	
13. Detail FAI: <input checked="" type="checkbox"/> Assembly FAI: <input type="checkbox"/>	14. Full FAI: <input checked="" type="checkbox"/> Partial FAI: <input type="checkbox"/> <i>Baseline Part Number (Including Revision Level)</i>			
Reason for Partial:			AOG <input type="checkbox"/> FAA Approved <input type="checkbox"/>	
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Customer LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES		Program NO PROGRAM ASSIGNED		
From Division - To Division -				
FAI Complete <input type="radio"/> FAI Not Complete <input checked="" type="radio"/>				
19. Signature		20. Date		
21. Reviewed By		22. Date		
23. Customer Approval		24. Date		

Standard FAI Guidelines – Form 2

Form 2 will capture materials, special processes and functional testing applicable to the First Article part or assembly. These special processes shall be listed in chronological order as they appear in the manufacturing process.

At a minimum, the Material Cert packages will consist of the Material Supplier C of C, and the Manufacturer's Cert and Test Report.

Form 2 shall address all materials, special processes and specifications where the resulting output cannot be verified by subsequent monitoring or measurement.

If a substitution material and/or special process is used per customer substitution documentation, that substitution **MUST** be recorded on Form 2.

Evidence of traceability between the material cert and work order / traveler should be maintained and furnished.

Material requirements contained in the Engineering definition should be reflected on the material certification.

- **EXAMPLE:** .200" sheet AMS-QQ-A-250/12

Standard FAI Guidelines – Form 2 (continued)

Processing Certifications shall reference the relative part number; if not, a copy of the referenced work order/traveler must be attached to show traceability.

Process Codes are NOT the same as Finish Codes.

Column 7 of Form 2 is for the Codes associated to “Special Processes”.

Example: Boeing’s Finish Code for “Sealed Chromic Acid Anodize” is F-18.05.

The Process code for “Sealed Chromic Acid Anodize” is 304, per Boeing’s D1-4426.

The code “304” is the what should be entered in Column 7 of Form 2.

NOTE: engineering notes depicting the Finish Codes shall be bubbled and recorded on Form 3.

When Engineering requires Heat Treatment and / or Aging

Both Heat Treat and Age condition(s) are to be recorded on Form 2 as a “Special Process” in accordance with the Customer Approved Supplier Processor List (ASPL). A reference to the certification shall be included on Form 3.

Hardness and Conductivity Requirements

If hardness and conductivity is listed as a Special Process, it shall be listed on Form 2, with the requirements and results posted on Form 3.

AS9102 FAI Guideline - Form 2

Box 1, 2, 3 & 4 and Sheet Number(s):

Net-Inspect will automatically fill in these boxes for Form 2.

Column 5: Material or Process

Enter the name of the materials used and the “special” processes performed. For metallic material, include alloy (2014, 2024, 7075, etc.) temper, or condition of the material (ex: “7075-T3511 Aluminum”)

Include all materials that are incorporated into the FAI part, (e.g. weld / braze filler, sealant, etc.).

Do not include processing material such as acid etchants.

AS/EN/SJAC9102 Rev B First Article Inspection

Form 2: Product Accountability - Materials, Special Processes, and Functional Testing

1. Part Number: 73P5731111S001		2. Part Name: Synthetic Test Part		3. Serial Number: N/A		4. FAIR Number: 5439	
5. Material Name	6. Specification number	7. Code	8. Supplier	9. Customer approval verification	10. Certificate of Conformance Number		
Materials							
2024-0 .025 ALUM SHEET	AMS-QQ-A-250/05_ B	N/A	CASTLE METALS 3050 S HYDRAULIC WICHITA KS. 67216 / KAISER TRENTWOOD WORKS SPOKANE WA 99215	NA	PO: 123456; LOT: 7891011B1		
Processes							
HEAT TREAT TO AQ	GAMPS 5108_E	T62	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	Yes	PO: 98765; Order 54321		
Age to T62	GAMPS 5108_E	T62	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	Yes	PO: 98765; Order 54321		
Inspections							
HARDNESS	AMS 2658_D	N/A	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	NA	PO: 98765; Order 54321		
CONDUCTIVITY	AMS 2658_D	N/A	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	NA	PO: 98765; Order 54321		
11. Functional Test Procedure Number				12. Acceptance Report Number			
13. Comments:							
14. Signature					15. Date		

AS9102 FAI Guideline - Form 2 (continued)

AS/EN/SJAC9102 Rev B First Article Inspection

Column 6: Specification

Enter material or process Specification Number, **including Specification revision level and relative Amendment(s) as required**. Include permitted alternates, if used and its governing document, Class and material form (e.g. sheet, bar, etc.). At a minimum, identify all specifications (and their revisions) that are called out directly on the build documentation (Engineering Drawing).

Column 7: Code

Enter Customer assigned material or process code per, as applicable per customer requirements.

NOTE: If none required, list "N/A". See Sheet 20 for explanation.

Form 2: Product Accountability - Materials, Special Processes, and Functional Testing

1. Part Number: 73P5731111S001		2. Part Name: Synthetic Test Part		3. Serial Number: N/A		4. FAIR Number: 5439	
5. Material Name	6. Specification number	7. Code		8. Supplier	9. Customer approval verification	10. Certificate of Conformance Number	
Materials							
2024-0 .025 ALUM SHEET	AMS-QQ-X-250/05_ B	N/A		CASTLE METALS 3050 S HYDRAULIC WICHITA KS. 67216 / KAISER TRENTWOOD WORKS SPOKANE WA 99215	NA	PO: 123456; LOT: 7891011B1	
Processes							
HEAT TREAT TO AQ	GAMPS 5108_E	T62		Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	Yes	PO: 98765; Order 54321	
Age to T62	GAMPS 5108_E	T62		Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	Yes	PO: 98765; Order 54321	
Inspections							
HARDNESS	AMS 2658_D	N/A		Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	NA	PO: 98765; Order 54321	
CONDUCTIVITY	AMS 2658_D	N/A		Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	NA	PO: 98765; Order 54321	
11. Functional Test Procedure Number				12. Acceptance Report Number			
13. Comments:							
14. Signature						15. Date	

AS9102 FAI Guideline - Form 2 (continued)

AS/EN/SJAC9102 Rev B First Article Inspection

Column 8: Supplier

Customer given **supplier code** (found in the customer ASL) and the **name and address** of the organization supplying the material to your facility, or performing the special process.

Column 9: Customer Approval Verification

Indicate YES if the special process or material source requires to be approved by the customer. Enter "N/A" if customer approval is not required. **NOTE:** DO NOT enter NO.

Column 10: Certificate of Conformance Number

Number of the Certificate of Conformance (e.g. heat lot number, raw material test report number, special process Certificate of Compliance number, PO number, traceability number, etc ...).

Form 2: Product Accountability - Materials, Special Processes, and Functional Testing

1. Part Number: 73P5731111S001		2. Part Name: Synthetic Test Part		3. Serial Number: N/A		4. FAIR Number: 5439	
5. Material Name	6. Specification number	7. Code	8. Supplier	9. Customer approval verification	10. Certificate of Conformance Number		
Materials							
2024-0 .025 ALUM SHEET	AMS-QQ-A-250/05_ B	N/A	CASTLE METALS 3050 S HYDRAULIC WICHITA KS. 67216 / KAISER TRENTWOOD WORKS SPOKANE WA 99215	NA	PO: 123456; LOT: 7891011B1		
Processes							
HEAT TREAT TO AQ	GAMPS 5108_E	T62	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	Yes	PO: 98765; Order 5432		
Age to T62	GAMPS 5108_E	T62	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	Yes	PO: 98765; Order 5432		
Inspections							
HARDNESS	AMS 2658_D	N/A	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	NA	PO: 98765; Order 5432		
CONDUCTIVITY	AMS 2658_D	N/A	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	NA	PO: 98765; Order 5432		
11. Functional Test Procedure Number				12. Acceptance Report Number			
13. Comments:							
14. Signature				15. Date			

AS9102 FAI Guideline - Form 2 (continued)

AS/EN/SJAC9102 Rev B First Article Inspection

Form 2: Product Accountability - Materials, Special Processes, and Functional Testing

Box 11: Functional Test Procedure

Complete if a Functional Test Procedure is called out as Design Requirement.

Box 12: Acceptance Report Number

The functional test certificate indicating that test requirements have been met.
NOTE: Enter "N/A" if no data.

Box 13: Comments

Enter Comments as applicable.

Box 14, 15: Signature and Date

These are Auto Generated in Net-Inspect once the FAI has been saved / Signed.

1. Part Number: 73P5731111S001		2. Part Name: Synthetic Test Part		3. Serial Number: N/A		4. FAIR Number: 5439	
5. Material Name	6. Specification number	7. Code	8. Supplier	9. Customer approval verification	10. Certificate of Conformance Number		
Materials							
2024-0 .025 ALUM SHEET	AMS-QQ-A-250/05_B	N/A	CASTLE METALS 3050 S HYDRAULIC WICHITA KS. 67216 / KAISER TRENTWOOD WORKS SPOKANE WA 99215	NA	PO: 123456; LOT: 7891011B1		
Processes							
HEAT TREAT TO AQ	GAMPS 5108_E	T62	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	Yes	PO: 98765; Order 54321		
Age to T62	GAMPS 5108_E	T62	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	Yes	PO: 98765; Order 54321		
Inspections							
HARDNESS	AMS 2658_D	N/A	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	NA	PO: 98765; Order 54321		
CONDUCTIVITY	AMS 2658_D	N/A	Global Heat Treat, 1234 Main St, Emerald City, KS GAS1472	NA	PO: 98765; Order 54321		
11. Functional Test Procedure Number				12. Acceptance Report Number			
13. Comments:							
14. Signature				15. Date			

Standard FAI Guidelines – Form 3

Stock Material Thickness shall be included on Form 3

Stock Material Temper shall be included on Form 3

Grain Direction (where specified in Engineering) shall be included on Form 3

All dimensions shown on drawing face must be bubbled and reported on Form 3. Referenced Dimensions are NOT required, but may be bubbled – see FAI APP-001 for Customer Requirements (ex: Sikorsky's SSQR)

Unless verified by CMM, Romer Arm, Scanner, etc.; un-dimensioned features from Customer supplied models will be supported by Conventional Inspection Sheet/Model Based Drawing showing dimensions and tolerance, and must show evidence of QA validation. The drawing's title block must reference the model and its revision.

All GD&T controls will be bubbled on drawings and reported on Form 3. This also applies to the supporting BASIC dimension, UNLESS it is reported via the CMM report attached to the FAI.

Standard FAI Guidelines – Form 3 (continued)

Engineering established Datum Systems and/or targets must be demonstrated in CMM alignment reporting.

Be aware of restraining requirements for datum.

CMM report coordinate data must be reported in the same format as the coordinate system established by the Model as required.

Non-modified features of extrusion drawings shall also be recorded on Form 3.

The Part Mark specification/requirement will be bubbled and recorded on Form 3

When attaching a nut plate to a detail, bubble and record:

- Hole to Hole dimensions (as required in the nut-plate spec)
- All reportable dimensions for installed rivet (requirements are found in the installation spec).
- For Detail parts, record Rivet attach hole diameter & countersink size
- For Assemblies, record the Flushness requirement and actual.

AS9102 FAI Guideline - Form 3

Column 5: Characteristic Number

Unique assigned number for each Design Characteristic. Must correlate with the “bubbled” engineering characteristics

Column 6: Reference Location

Location of the Design Characteristic (e.g. drawing zone, page number and section, specification, etc. If the Eng. Is divided into zones, it is required by all our customers to list the sheet and zone that the characteristic falls within. It is also required to provide the Section/View label when applicable.

AS/EN/SJAC9102 Rev B First Article Inspection

Form 3: Characteristic Accountability, Verification and Compatibility Evaluation

1. Part Number: 73P5731111S001		2. Part Name: Synthetic Test Part	
Characteristic Accountability			
5. Char. No.	6. Reference Location	7. Characteristic Designator	8. Requirement
1 Op #1	SHT1; ZN-A12 Bubble #1	N/A	RIB THICKNESS 2X (0.120 +/- 0.010) UNITS= IN
2 Op #1	PL NOTE #1 Bubble #2	N/A	125RHR Maximum Surface Finish, unless otherwise noted on drawing (<= 125)
3 Op #1	PL NOTE #2 Bubble #3	N/A	HARDNESS (>= 82) UNITS= 15T
Comments: SEE CERT			
4	PL NOTE #2	N/A	CONDUCTIVITY (35 - 45)

[See next sheet for additional Column 6 Examples]

AS9102 FAI Guideline - Form 3 (continued)

Column 6: Reference Location - Examples

If the engineering is divided into zones, it is required by all of our customers to list the sheet and zone that characteristic falls in. It is also required to provide the cutout view label when applicable.

- **EX:** Sheet 2, Zone B3 would be listed as “**2B3**”
- **EX:** Sheet 4, Zone E2, Cutout View would be listed as “**4E2A-A**”

Specification controlled features like lightening holes or heads should list the specification that controls the feature.

- **EX:** A hole called out as “**SS5100-4**” on Sheet 1 zone C5 should list “**SS5100-4**” for the dimensions specific to the spec and for location of the hole itself note “**1C5**”

For characteristics that extend past one particular zone, list the range on the drawing.

- **EX:** Sheet 2, Zone B3 and B4 could be listed as “**2B3-4**” or “**2B3/B4**”, etc.

If the engineering is not divided into zones, at least provide the sheet number on which the part is shown.

For characteristics defined by designed tooling, try to list the drawing zone if possible. Be sure to list the designed tool used to inspect that feature in Column 10.

For characteristics that originate from the PO, list “PO”; from a TSSP - list TSSP/Rev and its page number; from an E.O. - list the E.O. number and page number; etc...

AS9102 FAI Guideline - Form 3 (continued)

Column 7: Characteristic Designator

Enter "N/A", unless the feature is specifically defined by the customer as a Key Characteristic, Flight Safety, Critical, etc ... item.

Column 8: Requirement

Specified requirement for the Design Characteristic (e.g. drawing dimensional characteristics with nominal and tolerances included, drawing notes, specification requirements, etc.)

All Notes shall be listed on Form 3.

Form 3: Characteristic Accountability, Verification and Compatibility Evaluation

1. Part Number: 73P5731111S001		2. Part Name: Synthetic Test Part	
Characteristic Accountability			
5. Char. No.	6. Reference Location	7. Characteristic Designator	8. Requirement
1 Op #1	SHT1; ZN-A12 Bubble #1	N/A	RIB THICKNESS 2X (0.120 +/- 0.010) UNITS= IN
2 Op #1	PL NOTE #1 Bubble #2	N/A	125RHR Maximum Surface Finish, unless otherwise noted on drawing (<= 125)
3 Op #1	PL NOTE #2 Bubble #3	N/A	HARDNESS (>= 82) UNITS= 15T
Comments: SEE CERT			
4	PL NOTE #3	N/A	CONDUCTIVITY (25 - 40)

[See next sheet for additional Column 8 Examples]


AS9102 FAI Guideline - Form 3 (continued)

Column 8: Requirement - Examples

A flag note in the PL states that flange heights should be within $+.000/- .015$ "

The flange height requirement is depicted as $.750$ " on the drawing.

The requirement for the flange height should be entered as $+.750 +.000/- .015$ on Form 3.




10 Op #1	PL NOTE #7 Bubble #10	N/A	FLANGE HEIGHTS TO BE WITHIN $+.000/- .015$	Pass	N/A	N/A	GAGE USED: N/A
11 Op #1	SHT1, ZN-B6 Bubble #11	N/A	FLANGE HEIGHT ($0.750 +.000,-$ 0.015) UNITS= IN	.746	N/A	N/A	GAGE USED: HEIGHT GAGE; LMI-114

A general design feature that applies to multiple locations may be recorded as one characteristic number.

5X $.098 - .103$

$.25R$ TYP

R $.50$ 4Places



12 Op #1	SHT1, ZN-B12 Bubble #12	N/A	RADIUS 4X ($0.090 +.030,-0.030$) UNITS= IN	Pass	RADIUS GAGE; LMI-411; $.063-.109$	N/A	GAGE USED: N/A
Comments: MEASURED $.094$ (4)PLC							

AS9102 FAI Guideline - Form 3 (continued)

Column 9: Results

List measurement(s) obtained for the Design Characteristics. All measurements shall be listed in the same units of measure as indicated on the drawing.

For Multiple Characteristics, list each characteristic as individual values or list once with the minimum and maximum of measured values attained.

You can click the “plus sign” to add another field for a measurement value.

If one of the multiple characteristics is found to be non-conforming, then that specific characteristic must be listed separately with the measured value noted.

The screenshot displays the LMI Aerospace FAI Form 3 software interface. The top navigation bar includes 'inspect', 'First Articles', 'Quality Management', 'Calibration', 'Machine Management', and 'APQP'. The main header shows 'Form 3: Characteristic Accountability, Verification and Compatibility Evaluation'. Below this, there are input fields for '1. Part Number' (73P5731111S001), '2. Part Name' (Synthetic Test Part), '3. Serial Number' (N/A), and '4. FAIR Number' (5439). The 'Characteristics' section is expanded, showing a table with columns for '5. Char. No.', '6. Reference Location', '7. Characteristic Designator', '8. Requirement', '9. Results', '10. Designed / Qualified Tooling', and '11. Nonconformance Number'. The table contains two rows of data. The first row shows a characteristic with a requirement of 'RIB THICKNESS 2X' and a result of '.123'. The second row shows a characteristic with a requirement of '125SRHR Maximum Surface Finish, unless otherwise' and a result of '98'. A red arrow points from the 'plus sign' in the 'Results' column to the 'ADD A CHARACTERISTIC' button. Another red arrow points from the 'plus sign' in the 'Results' column to the 'Results' field for the first characteristic.

5. Char. No.	6. Reference Location	7. Characteristic Designator	8. Requirement	9. Results	10. Designed / Qualified Tooling	11. Nonconformance Number
1	SHT1; ZN-A	N/A	RIB THICKNESS 2X Symmetrical Nominal: 0.120 High / Low Tol: 0.010	.123 .108	N/A N/A	N/A NMD#123456
2	PL NOTE #1	N/A	125SRHR Maximum Surface Finish, unless otherwise Unilateral Upper High Specification: 125	98	Profilometer; LM	N/A

[See next sheet for additional Column 9 examples]

AS9102 FAI Guideline - Form 3 (continued)

Column 9: Results - continuation

Example of a result with a range: A .100 flange thickness running .092 at bottom and .103 at top can be listed with both values, with a note in the Comments portion of that specific Characteristic explaining that the values represent the range.

Comment Example: UPPER/LOWER RANGE-VALUES PROVIDED

13 Op #1	SHT1, ZN-B6 Bubble #13	N/A	THICKNESS (0.100 +/- 0.010) UNITS= IN	.103	N/A	N/A	GAGE USED: ODI- TEST; LMI-112; 0- 1"
				.092	N/A	N/A	
<i>Comments:</i> UPPER/LOWER RANGE-VALUES PROVIDED							

For attribute data, use the verbiage “PASS” or “FAIL” to record the result.

For processes that require verification per Designed/Qualified Tooling (MTX, form block, set-back router jig, etc.), list the tool used to inspect and list the tolerance afterwards.

Ex: “Contour per CKF ± .03”

Results shall be recorded as PASS, and/or a provide a range of value relative to the method of verification in the Comments portion of that specific Characteristic .

14 Op #1	LSCP 73P5731111S001 REV A Bubble #14	N/A	CONTOUR PER CKF +/- .030 (0 +/- 0.030) UNITS= IN	Pass	CKF- 73P5731111S001 ; FEELER GAGE, LMI-098, .030	N/A	GAGE USED: N/A
-------------	--	-----	--	------	---	-----	----------------

For verification with a ¼-28 UNJF Thread Gage, Block 9 should be **PASS**.

15 Op #1	SHT1, ZN-A16 Bubble #15	N/A	¼-28 UNJF (0.2268 - 0.2300) UNITS= IN	Pass	¼-28 UNJF Thread Gage; LMI-504	N/A	GAGE USED: N/A
-------------	----------------------------	-----	--	------	-----------------------------------	-----	----------------

AS9102 FAI Guideline - Form 3 (continued)

Column 9: Results - continuation

For part marking, ensure that marking is legible, correct in content and size and properly located, per applicable specification.

If a Design Requirement requires verification testing, then the actual results will be recorded on form 3. If a laboratory report or certificate of test is included in the FAIR, then these results need not be written on the form; it is acceptable to reference back to Form 2 for special process results. Record PASS OR FAIL in Box 9 and add “See Form 2” in the Comments Block.

The laboratory report, or certificate of test, must show the specific values for the requirements and the actual results.

3 Op #1	PL NOTE #2 Bubble #3	N/A	HARDNESS (>= 82) UNITS= 15T	85.0	N/A	N/A	GAGE USED: N/A
				84.5	N/A	N/A	
<i>Comments:</i> SEE CERT							
4 Op #1	PL NOTE #2 Bubble #4	N/A	CONDUCTIVITY (35 - 45) UNITS= % IACS	39.5	N/A	N/A	GAGE USED: N/A
				39.0	N/A	N/A	
<i>Comments:</i> SEE CERT							

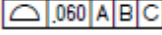
For metallurgical characteristics with visual verification requirement that are rated against standard photographs, color chip or surface chip, list the photo number of the closest comparison. A statement of conformance is acceptable (record the reference number in this field).

AS9102 FAI Guideline - Form 3 (continued)

Column 9: Results - continuation

Notes that apply to the FAI part shall be listed on Form 3 as an Attribute, with the Results listed as PASS or FAIL, unless the Note depicts a specific measurable requirement.

See Char #2, #7 and #16 for examples:

2 Op #1	PL NOTE #1 Bubble #2	N/A	125RHR Maximum Surface Finish, unless otherwise noted on drawing (<= 125)	98	Profilometer; LMI-101	N/A	GAGE USED: N/A
7 Op #1	PL NOTE #4 Bubble #7	N/A	MARK PER GAMPS 4050.	Pass	N/A	N/A	GAGE USED: N/A
16 Op #1	PL NOTE #8 Bubble #16	N/A	 UNLESS OTHERWISE NOTED, ALL UNDIMENSIONED FEATURES SHALL BE WITHIN .060 PROFILE FROM DATUM -A-, -B-, -C-. (0 +0.03,-0.03) UNITS= IN	.0158 -0.0017	CMM-102	N/A	GAGE USED: N/A
<i>Comments:</i> SEE CMM REPORT							

For Notes that are not applicable to the manufacturing process for the part, select “Not Reportable” from the “Measurement Type” drop-down in Column 9.

8 Op #1	PL NOTE #5 Bubble #8	N/A	INSTALL RIVETS PER GAMPS 4019	Not Reportable			GAGE USED: N/A
9 Op #1	PL NOTE #6 Bubble #9	N/A	NUTPLATE ORIENTATIONS TO BE WITHIN +/- 10 DEGREES FROM CATIA MODEL	Not Reportable			GAGE USED: N/A
10 Op #1	PL NOTE #7 Bubble #10	N/A	FLANGE HEIGHTS TO BE				GAGE USED: N/A

AS9102 FAI Guideline - Form 3 (continued)

Column 10: Designed/Qualified Tooling

If a specially designed tool (including NC programming) is used as a media of inspection, record the tool identification number. When Qualified Tooling (e.g. go/no go gages, thread gages, radius gages) is used for attribute acceptance, record the gage value or range (e.g. minimum/maximum value), as applicable, and its tool identification number.

NOTE: Posting/inclusion of standard inspection gages is not cause for FAIR rejection; Column 14 is the preferred location for posting standard inspection gages and their identification number (traceable to their calibration record).

Box 11: Non-conformance Number

Record both the customer and internal LMI non-conformance document reference number if the characteristic is found to be non-conforming. A delta FAI for the non-conforming characteristic(s) will be required on the next run of parts.

Box 12, 13: Signature / Date

These will be auto generated when signed and submitted

	3. Serial Number: N/A		4. FAIR Number: 5439	
	Inspection / Test Results			
	9. Results	10. Designed / Qualified Tooling	11. Nonconformance Number	14. Additional Data / Comments
20 +/-	.123 .108	N/A N/A	N/A QN98765432; NMD#123456	GAGE USED: 1" MIC; LMI-201
be toted on	98	Profilometer; LMI-101	N/A	GAGE USED: N/A
	85.0 84.5	N/A N/A	N/A N/A	GAGE USED: N/A
)	39.5 39.0	N/A N/A	N/A N/A	GAGE USED: N/A
L TO 8	Pass	PIN GAGE; LMI-241; .097-.102	N/A	GAGE USED: N/A

AS9102 FAI Guideline - Form 3 (continued)

Column 14: Additional Data / Comments

This field area is reserved for optional fields as deemed necessary by the organization. Add additional columns as required by the Organization or Customer.

Preferred Method is to list Standard Inspection Gage name and identification number (a number traceable to their calibration record) in Column 14. (See customer requirements)

	3. Serial Number:		4. FAIR Number: 5439	
	N/A			
	Inspection / Test Results			
	9. Results	10. Designed / Qualified Tooling	11. Nonconformance Number	14. Additional Data / Comments
20 +/-	123	N/A	N/A	GAGE USED: 1" MIC; LMI-201
	.108	N/A	QN98765432; NMD#123456	
me noted on	98	Profilometer; LMI-101	N/A	GAGE USED: N/A
	85.0	N/A	N/A	GAGE USED: N/A
	84.5	N/A	N/A	
)	39.5	N/A	N/A	GAGE USED: N/A
	39.0	N/A	N/A	
.L TO 8	Pass	PIN GAGE; LMI-241; .097-.102	N/A	GAGE USED: N/A

AS9102 FAI Guideline - CMM Reports

Identify CMM reports to reflect the FAI Report Number, Drawing Number, Revision, Model Release and Manufacturing Process Reference.

Create report headers that clearly identify each point group targeting a specific part feature or characteristic including Datum or targets used for alignment, all GD&T controls and supporting BASIC dimensions. Consider use of drawing identifiers as reflected on the Engineering to tie the maps and CMM reports back to the Engineering.

Provide specific Point Maps, **if required** (See customer requirements) – A sufficient number of mapped views should be provided to illustrate point placement for features and surfaces inspected. Maps are to be clearly labeled including alignment points to the drawing established Datum System.

Datum or target origin X, Y & Z values identified on Engineering, must be clearly identifiable on report and alignment maps. Maps do not need to show or list every point taken in the report, but do need to visually demonstrate placement of point groups. Maps provide the reviewer with a visual perspective of the measurement process and features inspected.

AS9102 FAI Guideline - FAI Package

FAI PACKAGES SHALL INCLUDE THE FOLLOWING AS APPLICABLE AND BE TRACEABLE TO THE FAI

Bubble drawing, model screen shot or sketch denoting design characteristics / parts list showing all of the unique part characteristics including all drawing, general and flag notes. This must include your approval and traceability to the authority dataset.

Unique characteristic accountability must correspond with unique identifier on the bubbled drawing / sketch / screen shot or link to CMM report.

- Material Certifications
- Process Certifications
- Completed FAI Forms
- Non-Conformance documents
- Test reports / results
- Casting / Forging approvals
- Completed Work Order and Re-Work Orders that represent the manufacturing process, as required
- Copy of the Customer Condition of Supply (e.g. TSSP, etc.), as required
- Photos

AS9102 FAI Guideline - FAI Package (continued)

FAI PACKAGES SHALL INCLUDE THE FOLLOWING AS APPLICABLE AND BE TRACEABLE TO THE FAI

Customer Approval of Frozen planning

Outside Data Sheet (Outside Processor) or Manufactured Engineering Planning Instruction Control Number

Supplier Information Requests (SIR)

Other fabrication records as indicated

CMM Reports – point maps and set-up instructions, as required

Along with the Part Number, a unique identifier should be logged on the supporting document(s), such as:

- FAI Report Number
- Manufacturing Process Reference Number

AS9102 FAI Guideline - FAI for “Pass-Through” parts @ LMI

Definition of “Pass-Through” product: *A LMI facility retains a contractual agreement for delivery of a product with a customer. The LMI facility has no role in its production. The product is manufactured completely at a source outside of the LMI facility. The LMI facility receives the product, creates a “cover” FAI, and delivers the product to the customer.*

As always, LMI Aerospace is responsible for providing a FAI Report to its customers. To facilitate that effort, with “Pass Through” product, the following information will assist in attaining a standard method that meets the customers’ and AS9102 requirements:

Step 1: the LMI facility that has been designated as the owner of the “Pass Through” product will initiate FAI Form 1, in Net Inspect. The difference in completing Form 1 is that the LMI PO number, associated with the Supplier, will be used in Field 9 (and Field 4, where applicable). A note is to be added, referencing the Supplier’s FAI number as well (see subsequent pages).
Step 2: attach a copy of the complete FAI package received from the Supplier (i.e. Form 1-2-3, material certs, process certs, CMM/Inspection reports, supporting documentation, etc...)



The purpose of the following two pages are to provide a guide as to how to complete Form 1, in Net Inspect, and what should be provided to ensure the customer that their FAI requirement and AS9102 is met.

A “hard copy” of Form 1 can also be generated and attached in Net Inspect, for customers that require the use of the standard AS9102 Form(s).

Note: This is being presented as a “best practice” for compliance to AS9102, in this scenario. The customer may mandate a different approach, which could override some or all this section.



AS9102 FAI Guideline - FAI for "Pass-Through" parts @ LMI (Continuation)

The following is the suggested method for the creation of the LMI FAI for "Pass-Through" product.

Field 4 : As with all FAIs, it is acceptable to also use the Manufacturing Process Reference number, in Field 9, as the Internal FAI Number (Field 4).

Field 9: With consideration of "Pass Through" parts, a work order/traveler is not generally issued. Therefore, it is acceptable to utilize the LMI Purchase Order, to the LMI Supplier, and Line Item number as the traceable number.

Field 14: Enter Select **Full FAI**

Field 11: Enter the Customer's assigned Supplier Code for the appropriate LMI facility.

Field 12: Enter the Customer's PO and Line Item number

User Comments Field: Add reference to Supplier and their FAI number in Form1 and Form 2 Comment sections.

NOTE: Net Inspect V.5 requires use of Form 2 Comment section

AS/EN/SJAC9102 Rev B First Article Inspection				
Form 1: Part Number Accountability				
1. Part Number Test	2. Part Name Test Part	3. Serial Number N/A	4. FAIR Number 4718 Internal FAI Number: Y00000/001	
5. Part Revision Level -	6. Drawing Number Test	7. Drawing revision level Test	8. Additional Changes Test	
9. Manufacturing Process Reference Y00000/001	10. Organization Name LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	11. Supplier Code Hxxxxxx	12. P.O.Number 00000000/001/Rev00	
13. Detail Part <input checked="" type="checkbox"/> Assembly FAI <input type="checkbox"/> Program: NO PROGRAM ASSIGNED	14. Full FAI <input checked="" type="checkbox"/> Partial FAI <input type="checkbox"/> Reason for Partial FAI:	Baseline Part Number including revision level		
a) If above part number is a detail part only, go to Field 19 b) If above part number is an assembly, go to the "INDEX" section below.				
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.				
15. Part Number	16. Part Name	17. Part Serial Number	Supplier	8. FAIR Number
1) Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition. 2) Also indicate if the FAI is complete per Section 4.4: FAI not Completed				
Customer LMI AEROSPACE				
From Division- To Division -				
19. Signature		20. Date		
21. Reviewed By		22. Date		
23. Customer Approval		24. Date		
User Comments: NOTE: This is a Purchased Part from supplier "My Machine Center Inc" See attached FAI 000000				





AS9102 FAI Guideline - FAI for “Pass-Through” parts @ LMI (Continuation)

The following is the suggested format for the standard AS9102 Form 1

SAE International

AS9102B
Form 1: Part Number Accountability

Sheet 1 of 1

Field 4 : The only difference from the Net Inspect version of Form 1, is to add a reference to the Net Inspect FAI number in Field 4.

Reason For Partial FAI field: Enter “N/A”; then follow up with the NOTE referencing the Supplier and their FAI number.

(NOTE: this NOTE is placed in the USER COMMENTS field of Net Inspect’s Form 1 – see previous slide).

1. Part Number : Test	2. Part Name: Test Part	3. Serial Number: N/A	4. FAI R Number: Y00000/001 (Net Inspect #4748)
5. Part Revision Level: Rev X	6. Drawing Number: 000X0000	7. Drawing revision level: Rev X	8. Additional Changes: INST X, Rev X
9. Manufacturing Process Reference: Y00000/001	10. Organization Name: LMI Aerospace St. Charles – Fountain Lakes	11. Supplier Code: Hxxxxxx	12. P.O. Number: 000000000/001/Rev00
13. Detail FAI <input checked="" type="checkbox"/>	14. Full FAI <input checked="" type="checkbox"/> Partial FAI <input type="checkbox"/> Baseline Part Number (including revision level): Rev Reason for Partial FAI: N/A NOTE: This is a Purchased Part from supplier “My Machine Center Inc”; See attached FAI 000000		
Assembly FAI <input type="checkbox"/>	a) if above part number is a detail part only, go to Field 19 b) if above part number is an assembly, go to the “INDEX” section below.		
INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.			
15. Part Number	16. Part Name	17. Part Serial Number	18. FAI R Number

Review of the FAIR

The FAI Report review will be performed in accordance with the requirements of AS9102 and LMI FAI STD-001.

Communicating with Source Inspector

When there is an interpretation of requirements that differs from FAI STD-001 (AS9102), politely request that the source inspector provide the basis for the different of requirements.

If needed, involve the Quality Manager and/or Quality Engineer in the discussion.

Appendix A

The following pages contain
Customer Specific FAI Requirements

AS9102 FAI Guideline

◇ Aviation Partners Boeing (APBP140-1, Q18, Rev. 02/15/2016)

○ Per AS9102 & LMI FAI_STD-001

- Form 2, Column 7: Enter Process Code, as listed on Boeing's D1-4426; if none, put "N/A".
- Form 2, Column 8: MUST include Supplier Code, as noted on Boeing's D1-4426 APL, for Special Processes.

◇ AIRBUS

○ Per AS9102 & LMI FAI_STD-001

- The FAIR shall include (In Comments; Column 13, Form 2) the actual weight and the last issue of the part, which can be located in the Part List of the drawing.

◇ Bell Helicopter Products & Programs (SQRM-001 Rev. E, 10/31/2017; Bell Supplier FAI Guidelines for AS9102 Rev A, 03/22/2018)

○ Per AS9102 & LMI FAI_STD-001

- Technical Data Package (TDP) revision is required on Form 1 (when applicable) ; location is optional.
- Date of Manufacture is required on Form 1; location is optional - inclusion in Box 9, with the Manufacturing Work Order number, is recommended.
- Form 2, Column 8: Enter Special Process Supplier Code, along with full name and full address.
- Provide Bell SMDAR Number, if applicable, on Form 3, Column 11.
- If there's a Lapse in manufacturing of 2 or more years, a Full FAI is required.
- If there's a Lapse in shipment of 2 or more years to Bell, provide a copy of the most recent FAI with parts.
- When an FAI provided to Bell is "not Complete" (Marked in Field 19, Form1) due to disposition of nonconforming characteristics or authorized deferment of an attribute being documented on the FAI, a Partial FAI reflecting subsequent compliance of these characteristics shall be submitted to Bell with compliant product *no later than the item's second shipment to Bell unless authorized in writing by Bell Quality.*
- Supplier shall uniquely identify each specified characteristic annotated within the digital data media (DDM) on a standard balloon drawing created by the supplier for the DDM.
- The completed First Article Inspection Report for the purchased BHT Part Number shall accompany the FAI Unit. The container is to be identified "FIRST ARTICLE ENCLOSED" and the shipping document annotated accordingly. If the FAI Part is included within a shipment of other like parts, a tag or suitable method of identifying the FAI item is required.
- Suppliers are required to maintain on file the applicable FAI reports for any product actively being provided to BHT.
- Supplier FAI Report and associated certifications/documents shall be uploaded to the Enovia FAI application in the Sell2Bell portal per the requirements noted below or as required by purchase order.

◇ Boeing Products & Programs (SB15-045, Rev. B, 03/05/2015)

○ Per AS9102 & LMI FAI_STD-001

AS9102 FAI Guideline

◇ Boeing (continued)

- Form 2, Column 7: Enter Process Code, as listed on Boeing's D1-4426; if none, put "N/A".
- Form 2, Column 8: MUST include the Supplier Code, as noted on Boeing's D1-4426 APL, for Special Processes.

◇ Bombardier (QD4.6-40, Section 7.5.1, Rev. 8, 10/2017, Amendment 0)

○ Per AS9102 & LMI FAI_STD-001

- Kits also require a FAIR – consisting of:
 - A list of all detail parts and / or sub-assembly part numbers.
 - A FAIR, in accordance with AS9102, for each detail part and/or sub assembly part number and the required quantity.
 - All hardware part numbers including the lot number and the required quantity.

Note: For the Airbus program: The FAIR shall include (In Comments; Column 13, Form 2) the actual weight and the last issue of the part, which can be located in the Part List of the drawing.

◇ Embraer (EQRS-Rev K, dated 12/2018, Section OPR 7.511.09)

○ Per AS9102 & LMI FAI_STD-001

- Supplier shall plan, conduct, and record Last Article Inspection (LAI) and First Article Inspection (FAI) according to AS9102

◇ GKN (Supplier Quality Manual, Rev B, Dated 04/04/2017; Procurement Clause 16)

○ Per AS9102 & LMI FAI_STD-001

- Packages with FAI's must be clearly marked stating "FAI Enclosed" visible on the outside of the package. All paperwork must be placed inside an envelope within the shipping container clearly identified stating "FAI Documentation Enclosed".
- When requested by GKN the supplier must send the appropriate tooling.
- When a drawing, model, tool, mylar (etc.) is needed to make the FAI and the supplier has it in their possession, the supplier must send the appropriate material with the First Article part, detail, subassembly (etc.). After GKN has accepted the FAI, the material will be promptly returned if requested.
- FAI reports shall identify ALL notes and characteristics as identified on the blue print and customer supplied documentation. Each line item shall have the blue print zone, method of inspection, equipment used and actual results recorded. Certifications shall be provided identifying all materials, processes performed and specification used (specification must meet customer requirements) and results. All process certs must have an original signature on the copy of the certification acknowledging that the process is accepted as correct for the particular FAI parts submitted. An accompanying copy of the report must be attached to packing bill. Inspection shall be at the Supplier's House as designated by GKN Supplier Quality. Supplier shall notify GKN supplier quality no less than two weeks in advance of FAI completion so that GKN supplier quality may determine the need for source inspection at the supplier site.
- Counterfeits Parts Prevention and Control: As part of the FAI review and approval, the verification and validation of all raw material and

AS9102 FAI Guideline

◇ GKN (continued)

associated details shall be conducted and authenticated in a manner that would prevent the introduction of counterfeit material or product. If any product is found to be suspect it shall be brought to the attention of GKN procurement with a detailed explanation of any suspect product shipped, inventory in-house or in process. Suppliers shall flow this requirement down to their sub-tier suppliers.

◇ gogo Air (*Supplier Quality Requirements D14521, Rev. M 09/28/2017*)

o Per AS9102 & LMI FAI_STD-001

- The First Article Inspection along with applicable material or test data/certifications (e.g. painting, plating, composition, x-ray, functional testing, etc.) shall be submitted electronically to AviationQuality@gogoair.com
- The supplier shall forward the partial (delta) First Article Inspection along with applicable material or test data/certifications (e.g. painting, plating, composition, x-ray, functional testing, etc.) with the lot of parts and to AviationQuality@gogoair.com for review and approval.

◇ Gulfstream (*AS9100 Quality System SQAR-9100, Section 6.1, Rev A, Dated 08/19/2005*)

o Per AS9102 & LMI FAI_STD-001

- Form 2, Column 7; Finish and Process Codes per Part List
- Form 2, Column 8: MUST include the Supplier Code, as noted on GAC's APL, for Special Processes.
- When requested by the customer, the First Article(s) may be performed on prototype articles to determine conformance status to available data.

◇ Honda Jet (*HACI P 10-1, Section 5.23, Rev C, Date 12/15/2018*)

o Per AS9102 & LMI FAI_STD-001

◇ Honeywell (*SQR-004, Rev 16, Date 05/13/2009*)

o Per AS9102 & LMI FAI_STD-001

◇ Israeli Aircraft Products & Programs (*CAG 9000, Rev 14, Section 15.2/8.5.1 and Appendix B, 04/2018*)

o Per AS9102 & LMI FAI_STD-001

- The First Article process shall be repeated for a lapse in production of over 2 years.
- Mark the item "First Article" or "FAI" with rubber stamp next to the part number identification.
- Attach a serviceable tag or CoC to the article, with statement "First Article" and the "first Article" report number.
- The First Article Inspection report shall accompany the shipment of First Article items delivered to IAI-CAG. An additional copy shall be stored with the manufacturing documentation.
- Upon IAI-CAG request, the supplier shall scan the FAI reports and forward the data to IA in digital media.

AS9102 FAI Guideline

◇ **Lockheed** (*Quality Clause Q2A, Rev 15, 01/31/2019*)

o Per AS9102 & LMI FAI_STD-001

- When Seller has manufactured and delivered products to a customer other than the Buyer and can provide objective evidence of an FAI compliant to AS9102 and this Quality Clause within the prior two years from the date of the PO or more than two years prior with evidence of continual production to the same configuration as defined by the PO, Buyer will accept the previous FAI documentation as evidence of compliance to the requirements of this PO.
- When Buyer has imposed condition-of-supply definitions (i.e., Production Operation Instruction Sheet [POIS]) through the PO that modify/re-order released engineering requirements, the FAI shall reflect the condition-of-supply.
- When applicable for Critical Items, Seller must provide objective evidence of manufacturing plan approval from Buyer's cognizant engineering authority prior to start of first production run.

◇ **Mitsubishi Aircraft Corporation (MITAC) Products and Programs** (*MSJ4064, Rev. B, 12/21/2017 Section 3.2.5*)

o Per AS9102 & LMI FAI_STD-001

◇ **Northrop Grumman Products and Programs** (*SQAR Revision Date 12/20/2017; Section 3.1*)

o Per AS9102 & LMI FAI_STD-001

- Form 1, Fields 11, 12, 21, 22, 23 and 24 are considered mandatory for Northrop Grumman. All Conditionally Required (CR) fields on FAI Report Forms 2 and 3 are considered mandatory.
- Any FAI report form generated shall not contain open fields. To ensure each field of the FAI has been reviewed, the supplier shall mark all open or unused fields "N/A".
- The FAI Report will remain open (Not Complete) if Qualification Testing is required per Engineering and not accomplished at time of FAI part verification.

Note 1: When standard note I1005 is specifically referenced in the PO, Northrop Grumman's FAI review and approval is required for the 3 step FAI activities. Supplier shall contact their assigned QFE a minimum of 14 days prior to the supplier beginning any manufacturing activity. NGAS' QFE may elect to review and/or participate in supplier's FAI activity throughout the process.

Note 2: This section does not apply to JSTARS Overhaul Items, Project ID:

JSTAR, and TSSRX. However, JSTAR Modification parts that are manufactured by the supplier as part of a JSTAR overhaul require a documented FAI.

AS9102 FAI Guideline

◇ **PRIMUS** – (SQR, Rev J, 04/10/2018, Document # :30504U, Section Q09); PCC Aerostructures SQRM SQR-10000, Section 7.14, Release D, 12/26/2017)

o Per AS9102 & LMI FAI_STD-001

- First Article Report must be re-accomplished under the following circumstances.
 - Document changes (drawing, Parts List, Specs, etc.) including relevant drawing or flag notes.
 - Any part which has not been produced by Supplier for a period longer than 24 months. (Or as designated by site specific requirements)
 - Changes to Supplier facility including; moving, expansion, change in manufacturing sources, inspection method, or substantial renovation, and significant management changes.
 - Change in manufacturing process or equipment use.
 - Change to the Bill of Materials (material, material specs, details, etc.)
- FAI will not be performed on any prototype parts, or parts manufactured using methods not representative of the normal production process, or non- production parts unless specified in the contract.
- When requested by Buyer, a Last Article Inspection (LAI) shall be performed on a part or assembly prior to reallocation of the manufacturing site. LAI consists of full FAI activities content including all activities necessary to capture all manufacturing and inspection activities.
Note: All Supplier generated First Article Records shall be retrievable and accessible within 24 hours notification from Buyer or Buyer customers upon request.

◇ **PRIMUS - Walden's Machine, LLC (QRS 1.06-2, Section 7.10, Rev AA, 02/23/2016)**

o Per AS9102 and LMI FAI_STD-001

- Unless otherwise arranged, the supplier's FAI must be accepted before product is shipped to Walden's.
- Hardware suppliers who are producing parts to standard configurations are exempt from submitting AS9102 First Article Inspection Reports but are still responsible for inspecting each lot of material to ensure it complies with engineering requirements. If modifications are made to standard hardware items to create unique configurations (such as P01 configurations), First Article Inspections shall be performed and submitted.

◇ Sikorsky (SSQR-01, Revision 1, 01/01/2017; Section 7.5.1.1, SSQR-01 Main Text, Rev. M, 09/30/2016, Section B)

○ Per AS9102 & LMI FAI_STD-001

- Contents of SSQR-01 “Main Text” contains requirements for First-time and Subsequent deliveries, in addition to supporting FAI requirements.
- All RDD & MBD parts will require a Sikorsky approved Inspection Plan (Inspection Checklist (ICL)) prior to documenting the part inspection, for FAI. Evidence of inspection plan approval will be a part number revision specific “approval letter”. See SSQR-01 “Main Text” for specifics.
Note: The Supplier shall submit their Inspection Plan approval letter, the Inspection Checklist (ICL) , “Validation Points” package, and any other required documentation, per SSQR-01 “Main Text”, with the FAI.
- A full or partial FAI shall be performed for affected characteristics unless otherwise specified by Sikorsky when any of the following occurs:
 - Change in design
 - Change in manufacturing source(s), process(es), inspection method(s), location(s) of manufacture, tooling or material(s).
 - Change in numerical control program or translation to another media.
 - Natural or man-made event, which may adversely affect a manufacturing process.
 - Lapse in production for two years or as specified by the customer.
- A replication of product part mark (via photograph or sample) that represents production marking shall be included within the FAI Report.
- Additional requirements for AS9102 FAI Form 1:
 - Fields 5 & 7 will show the revision of Sikorsky drawing field sheet1(FS1). [Example of Field 5: FS1=B, PL=A]
 - Field 6 will show just the ten digit drawing number. **MBD parts:** Field 5 will show the part revision letter from the model.
 - Field 7 will show both the Data Sheet revision and the Model revision.
 - Fields 15 and 16 will list the detail parts with SAC assigned part numbers. This includes castings and forgings used as the raw material for a machined part.
- Additional requirements for AS9102 FAI Form 3:
 - Field 14, for each characteristic: Record FAI Inspection Measuring Equipment used as a media of inspection. Record FAI Inspector Identification (e.g. signature, stamp, electronic authorization, etc.) used to signify the person that accomplished the inspection.
- All documentation MUST reference the Sikorsky part number and revision level.
- Handwritten documentation is NOT acceptable.

AS9102 FAI Guideline

◇ Spirit (MAA 1-10042-1F, 4/19/2019; MAA 1-10042-2D, 9/5/2019)

○ Per AS9102 and LMI FAI_STD-001

- ❖ All suppliers and their lower level sub-tiers will be required to utilize Spirit AeroSystems Inc. Net-Inspect system for all FAI submittals. When compiling the FAI within Net-Inspect all electronic forms and applicable fields are required to be completed. **You can no longer upload the FAIR it must be completed fully inside of Net – Inspect. In addition must include a Photo of Part Marking including Suppliers QA stamp validation on FAI part.**

Form 1, Field 2 – Part Name as identified in the Engineering definition/PO / BOM .

- Form 1, Field 3 – Leave field blank if the serial number is not available or not applicable .
- Form 1, Field 6 – This field contains the Drawing number or DPD dataset associated to the FAI part. Include file extension of data set info.
- Form 1, Field 7 – The revision should be in the same format as depicted in the engineering.
- Form 1, Field 8 – This field should be left blank where no authorized deviation document exists.
- Form 1, Field 18 – For standard catalogue items, this field is reserved for the Certificate of Conformance (C of C) number (e.g., raw material test report number, compliance report number, traceability number) assigned by the manufacturer of the standard catalogue item. Distributor certs must contain this number as assigned by raw Material manufacturer. This does not include any BAC hardware that will go on Form 2 as it is not standard catalogue items.
- Form 2, Column 8: MUST include the Supplier Code, as assigned by the O.E.M. customer , for Special Processes. Include all leading zeros.
- Form 3 - When a design requirement requires verification testing, then the actual results will be recorded on the form. Record the process checks (Rockwell Hardness and conductivity, edge break or tape test results, etc.) when required by the end- item customer.
- The CMM/Faro Arm report does not need to be bubbled, but does need to correspond to the Engineering feature listed on Form 3. (e.g. profile Bubble #17, See CMM Report 92-114)
- The FAI requirements may be satisfied by a partial FAI that addresses only the changes from a baseline part number provided all other characteristics were conforming on the previous FAI and are produced by the original production processes. When a partial FAI is performed, the organization shall, as a minimum, complete the affected fields in the FAI forms.
- When requested by Spirit, a Last Article Inspection (LAI) shall be performed on a part or assembly prior to reallocation of the manufacturing site. LAI consists of full FAI activities content including all activities necessary to capture all manufacturing and inspection activities which are not formalized in the LAI packet.
 - The Last Article Inspection Record shall consist of (as a minimum): The completed leader sheet, a marked up drawing or CMM print out, and a copy of the engineering with every operation and tool verified as being correct for content and sequence.

◇ Triumph – Vought Aircraft Product & Programs (SQR-011 Rev. F, 03/07/2018)

○ Per AS9102 & LMI FAI_STD-001

- Suppliers who have demonstrated poor first time-yield on FAI reviews will be required to complete the Net Inspect check sheet.
- The following items/documents (as applicable) shall become a part of the electronic record and shall be referenced and attached to the electronic FAI file for the applicable part number:

AS9102 FAI Guideline

◇ Triumph – Vought Aircraft Product & Programs *(continued)*

- Material Certifications
- Process Certifications
- Test Reports/ Results
- CMM Reports – **point maps and set-up instructions are mandatory**
- Copy of **COMPLETED** shop traveler that represents the manufacturing process
- Copy of all rework travelers
- Copy of the Triumph furnished TSSP
- Unique Characteristic Accountability – must correspond with unique identifier on bubbled drawing/sketch
- Photos (as applicable)
- Casting / Forging approvals (as applicable)
- Weld maps (as applicable)
- NDI/NDT techniques
- Manufacturing plan approvals (as applicable)
- Withholding Tags (as applicable)
- Supplier Information Request (SIR) (as applicable)
- The FAI requirement can be satisfied by either a dimensional report of the part or a dimensional report of the Check Fixture tool being used as a means of product acceptance. This dimensional report of the Check Fixture tool will ensure that all critical features of the part are being validated. The following are required to use the tool to satisfy the dimensional verification of the part and/or assembly:
 - The tool will be identified
 - The tool will be validated by dimensional report to ensure that all critical features of the part and/ or assembly will be validated
 - The tool will be called out in the supplier's planning
 - The tool will be periodically re-valuated to assure it still complies with engineering requirements

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