



# AS9102 FAI STANDARD

FAI STD-001 REV L

FEBRUARY 3, 2025



# **FAI STD-001**

**Applies to all Sonaca NA locations & Suppliers**

**\*\*\***

Review Appendix A  
for additional Customer requirements

## Objective of the FAI Standard

- Provide objective evidence of compliance to **AS9102Rev C** and customer requirements.
- Strive for a consistent FAI process across all Sonaca NA facilities and their Suppliers
- Reduce questions and confusion relative to completing FAI documentation.
- Eliminate Customer rejection/return of FAI packages.

## FAI Standard

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

***“COMPLIANCE” and “TRACEABILITY”***

The FAIR will provide proof of compliance and traceability to the AS9102 and Customer requirements for the product.

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## General Notes

- Do not combine detail part requirements and assembly requirements on one FAIR, even if it is manufactured per the same build package or job/release (*see exception below*). Detail part FAIs and assembly FAIs must be completed independently, with their own complete, individual FAI package.

**Exception:** When the engineering does not define the manufactured detail part as a unique part/dash number, separate from the assembly, the de 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 FAI may be produced to encompass the complete process.

## General Notes

- For Sonaca NA Suppliers: Each FAIR package will be submitted to SNA through Net-Inspect; this includes the sub-assembly and/or detail part FAIRs of an assembly FAIR.
- When allowed by customer, it is 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.

**Note:** Upload documents in pdf format, Excel files are no longer acceptable.



## General Notes

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

- a. The original FAI requirement shall continue to apply even after initial compliance.
- b. The FAI shall be repeated when changes occur that invalidate or are not represented in the original results, as determined by a multi-disciplinary team (e.g., members from responsible functions).
- c. The FAI requirements shall be satisfied by a FAI that addresses 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.

**NOTE 1:** *This is referred to as a partial FAI and the scope will be determined based the evaluation of process engineering or design changes under section 4.6.f.*

**NOTE 2:** *A full FAI may be completed in place of a partial FAI.*

## General Notes

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

d. When performing a partial FAI, the organization shall complete the affected fields in the FAI forms.

e. When performing 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).

**NOTE 1:** *If a nonconformance is detected during FAI, the design characteristics not affected by the nonconformance are still valid, regardless of the product nonconformance disposition (e.g., scrap).*



## General Notes

NOTE 2: FAI requirements on a previously approved FAI performed on identical characteristics of similar parts produced by identical means are valid. FAI requirements may be satisfied in this manner.

For similar parts made using the same processes (e.g., identical means) except for a few characteristics, a complete FAI can be done on one part and for the similar parts account for only the unique characteristics. On Form 3 for the similar parts, record the unique characteristics. This provides objective evidence and traceability for all applicable design characteristics.

## General Notes

f. The organization shall have a documented process to evaluate any changes to product realization processes or engineering/design requirements (see supporting sub-sections 1-6) that invalidate or are not represented in the previous FAI and then perform a full or partial FAI, as determined by the evaluation. The organization shall perform the evaluation when any of the following occurs:

1. A change in engineering definition affecting design characteristics.
2. A change in manufacturing source(s), process(es), inspection method(s), tooling, materials/alternate materials, or location of manufacture. This includes BOM changes.
3. A change in the numerical control program or translation to another media.
4. A natural or man-made event, which can adversely affect the manufacturing process.

## General Notes

5. An implementation of corrective action required to complete a previous FAI, as defined in 4.5.

6. A lapse in production for two years for any characteristics that may be impacted. This lapse is from the completion of the last production operation to the actual restart of production (See customer requirements for deviations to this standard).

**Note: See FAI Event Table on the next slide as a guide for creating a full or partial FAI.**

## FAI Event Table

Event Description	FAI Type	Note
New base part number	Full FAI	
New part dash number	Full or partial FAI	Partial FAI may be performed on features changed for new dash number
First time supplied to customer	Full or partial FAI	Partial FAI may be performed in situations where the mfg. processes and/or engineering requirements have not changed, the only change is the source of the customer PO.  This includes work transfers within and outside SNA
Initial FAI required rework or MRB because of a non-conformance	Partial FAI required on next lot to cover previous non-conforming features	
A change in process, material, tooling, or inspection method. <i>This includes changes in Approved Sources for Special Processes</i>	Partial FAI	This includes changes made by sub-tier suppliers
A change in manufacturing source or location of manufacturing equipment, including tooling from another supplier or division of the same supplier	Full FAI	
New or reworked tool / tooling	Partial FAI	Scope to include all features affected by the tooling
Two-year* lapse in production	Full FAI	*Some customer requirements may differ from the two-year time criteria.



# AS9102 FAI Standard - Form 1

## Initiating a FAIR in Net Inspect (this page is not applicable to std. AS9102 form)

**Customer:** Select the customer from a drop-down list - See Page 9 for instructions relative to SNA's internal FAI Reports being generated for Customers that do not receive FAIRs via Net Inspect.

**SNA facilities** – select the appropriate customer

**Suppliers** – The customer selection is the SNA facility shown on the PO.

*Note: For “Drop Ship” locations, the SNA facility authorizing the “Drop Ship” is the customer.  
[See Page 10 for Guide on the SNA PO information]*

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

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1 - Part Number Accountability

1. Part Number	2. Part Name	3. Serial Number	4. FAI Number Customer FAI # Internal FAI Number ADD FAI Approved
5. Part Revision Level	6. Drawing Number	7. Drawing revision level	8. Additional Changes
9. Manufacturing Process Reference	10. Organization Name UAE AEROSPACE ST. CHARLES	11. Supplier Code	12. P.O. Number
13. Detail Part # Assembly FAI Program: List of Programs	14. Full FAI Partial FAI Reason for Partial FAI	Baseline Part number including revision level Customer Part Number	

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. FAI Number
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				

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 Complete ☐ FAI not Complete ☐ Void ☐ Pass/Fail ☐ Select

Customer: UAE AEROSPACE

19. Signature	Signature	20. Date
21. Reviewed By	Save and close the FAI	22. Date
23. Customer Approval		24. Date

SAVE

# AS9102 FAI Standard - Form 1

## Initiating a FAIR in Net Inspect when the SNA Customer Does Not Require use of Net Inspect

**Customer:** Select your 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. 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

1. Part Number  
2. Part Name  
3. Serial Number  
4. FAI Number  
Customer FAI #  
Internal FAI Number  
ADD  
FAI Approved

5. Part Revision Level  
6. Drawing Number  
7. Drawing revision level  
8. Additional Changes

9. Manufacturing Process Reference  
10. Organization Name  
11. Supplier Code  
12. P.O. Number

13. Detail Part  
14. Full FAI  
15. Partial FAI  
Reason for Partial FAI  
Customer Part Number

Program: List of Programs

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.

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. FAI Number
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				

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 Complete ☐ FAI not Complete ☐ Void ☐ Pass/Fail Select

Customer: List of Programs

19. Signature  
20. Date  
21. Reviewed By  
22. Date  
23. Customer Approval  
24. Date

Print

## SNA Jobscope Purchase Order Information

Supplier Code Number      Customer Location      PO Number

PO Line Item

PURCHASE ORDER

Bill : LMI Aerospace  
P.O. Box 940  
St. Charles, MO 63302-0940

Vendor: LMI WASHINGTON  
6325 AVANTHA DRIVE  
WASHINGTON MO 63090  
DADU10

Ship to : LMI SAVANNAH  
101 COLEMAN BLVD. UNIT E  
SAVANNAH GA 31408

Page : 1  
PO No : A11111  
Change :  
Date :

Attn :  
Route :  
Buyer :  
PO No. & Item # must be referenced on Packing List & Invoice

Terms :  
FOB :  
Freight:  
Shp Pnt:

Item#	Description	Qty	U/M	Unit Price	Ext. Amount
001	BRACKET, MOUNTING				
002E					

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

## SAP Purchase Order Information

PO Number



**Purchase Order: 4500088612**

LMI Aerospace Corporate Headquarters  
3600 Mueller Road  
Saint Charles, Missouri 63301-8004

Page 1 of 14

You must reference this order and item number on all packing slips and invoices.

**Supplier Address:**

LMI - St. Charles-Ft. Lakes  
411 Fountain Lakes Blvd  
St. Charles MO 63301

Creation Date: 12/07/2021  
Change Date: 12/14/2021  
Change Order: 00000001  
Change Reason: add lines 190-240

**Ship To Instructions:**

LMI - TULSA DISTRIBUTION  
5270 SKIATOOK RD  
CATOOSA OK 74015

Payment Terms: NT30 Net 30 Days  
Inco Terms: FOB ORIGIN

**LMI Routing:**

**Invoice To:**

APinvoices@sonaca-na.com

Buyer Name: Ana Saraiva  
Phone: 636-688-3252  
Email: asaraiva@lmiaerospace.com

**Header Text:**

The LMI Supplier Quality Requirements Manual (SQRM) governing this PO is located on the LMI Website <https://www.lmiaerospace.com/supplier-management/>. The review of this document is mandatory.

**PO Line Items:**

Item	Material Number Description	Delivery Date	Ordering Quantity	UoM	Unit Price	Extended Price
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# AS9102 FAI Standard - Form 1

## Guide for completing Box 1 and Box 9 for SNA 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.*

**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.

Form 1: Part Number Accountability

<b>1. Part Number:</b>  73P5731111S001	<b>2. Part Name:</b>  Synthetic Test Part
<b>5. Part Revision Level:</b>  A	<b>6. Drawing Number:</b>  73P5731111S001 -- A.CATPart
<b>9. Manufacturing Process Reference:</b>  12345609-0001/ 73P5741111S001L01	<b>10. Organization Name:</b>  LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES

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

### Examples:

12345609-0001 (L01) or

12345609-0001/73P5731111S001L01

# AS9102 FAI Standard - Form 1

## 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)

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1 - Part Number Accountability

1. Part Number	2. Part Name	3. Serial Number	4. FAIR Number
			Customer FAI # Internal FAI Number ADD FAI Approved
5. Part Revision Level	6. Drawing Number	7. Drawing Revision Level	8. Additional Changes
9. Manufacturing Process Reference	10. Organization Name	11. Supplier Code	12. P.O. Number
	LM AEROSPACE ST. CHARLES		
13. Detail Part # Assembly FAI	14. Full FAI Partial FAI	Baseline Part Number including revision level	
Program: List of Programs	Reason for Partial FAI	Customer Part Number	

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.

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
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				

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.c: ☐ FAI Complete ☐ FAI Not Complete ☐ Void ☐ Pass/Fail ☐ Select

Customer: LM AEROSPACE

19. Signature:  Signature

20. Date:

21. Reviewed By:  Save and close the FAI

22. Date:

23. Customer Approval:

24. Date:

25. Comments:

SAVE

# AS9102 FAI Standard - Form 1

## 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 SNA 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, EO, etc.).

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1 - Part Number Accountability

1. Part Number	2. Part Name	3. Serial Number	4. FAI Number Customer FAI # Internal FAI Number ADD FAI Approved
5. Part Revision Level	6. Drawing Number	7. Drawing revision level	8. Additional Changes
9. Manufacturing Process Reference	10. Organization Name LM AEROSPACE, ST. CHARLES	11. Supplier Code	12. P.O. Number
13. Detail Part # Assembly FAI	14. Full FAI Partial FAI	Baseline Part number including revision level	
Program: List of Programs	Reason for Partial FAI	Customer Part Number	

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. FAI Number
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				

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.c: ☐ FAI Complete ☐ FAI not Complete ☐ Void ☐ Pass/Fail Select

Customer: LM AEROSPACE

19. Signature	20. Date
21. Reviewed By	22. Date
23. Customer Approval	24. Date

SAVE

# AS9102 FAI Standard - Form 1

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

SNA assigns a 6-character Supplier Code to their suppliers; which can be found on the SNA PO.

## Box 12: P.O. Number

Customer PO number, PO Line Item number, Change number (if other than “ORIG”), and Contract Number (if applicable).

AS/EN/SJAC9102 Rev B First Article Inspection

Form 1 - Part Number Accountability

1. Part Number	2. Part Name	3. Serial Number	4. FAI Number Customer FAI # Internal FAI Number ADD FAI Approved
5. Part Revision Level	6. Drawing Number	7. Drawing revision level	8. Additional Changes
9. Manufacturing Process Reference	10. Organization Name LME AEROSPACE ST. CHARLES	11. Supplier Code	12. P.O. Number
13. Detail Part # Assembly FAI	14. Full FAI # Partial FAI	Baseline Part Number including revision level	Customer Part Number

Program: List of Programs

Reason for Partial FAI

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.

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. FAI Number
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				

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.c: ☐ FAI Complete ☐ FAI not Complete ☐ Void ☐ Pass/Fail ☐ Select

Customer: LME AEROSPACE

19. Signature: [Signature] Signature

20. Date: [Date]

21. Reviewed By: [Name] Save and close the FAI Close

22. Date: [Date]

23. Customer Approval: [Signature]

24. Date: [Date]

25. Comments: [Text]

SAVE

# AS9102 FAI Standard - Form 1

**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

1. Part Number  
2. Part Name  
3. Serial Number  
4. FAI Number  
Customer FAI #  
Internal FAI Number  
ADD  
FAI Approved

5. Part Revision Level  
6. Drawing Number  
7. Drawing revision level  
8. Additional Changes

9. Manufacturing Process Reference  
10. Organization Name  
11. Supplier Code  
12. P.O. Number

13. Detail Part ☐ Assembly FAI ☐  
14. Full FAI ☐ Partial FAI ☐  
Program: Reason for Partial FAI  
Baseline Part Number including revision level  
Customer Part Number

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.

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. FAI Number
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				

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 Complete ☐ FAI not Complete ☐ Pass/Fail Select

Customer: UAC AEROSPACE

19. Signature  
20. Date  
21. Reviewed By  
22. Date  
23. Customer Approval  
24. Date

1000 Comments

SAVE

# AS9102 FAI Standard - Form 1

## 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 Form 1, does not provide a place to enter the supplier's name. Place the supplier's 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

The screenshot shows the AS9102 Form 1, titled "AS/EN/SJAC9102 Rev B First Article Inspection". The form is divided into several sections. Red arrows point to the following fields:

- Field 1: Part Number (with a red arrow pointing to the "Delete row" button)
- Field 2: Part Name
- Field 3: Serial Number
- Field 4: FAIR Number (with a red arrow pointing to the "Delete row" button)
- Field 5: Part Revision Level
- Field 6: Drawing Number
- Field 7: Drawing revision level
- Field 8: Additional Changes
- Field 9: Manufacturing Process Reference
- Field 10: Organization Name (with a red arrow pointing to the "Delete row" button)
- Field 11: Supplier Code
- Field 12: P.O. Number
- Field 13: Detail Part # Assembly FAI
- Field 14: Full FAI
- Field 15: Supplier Name (with a red arrow pointing to the "Delete row" button)
- Field 16: Part Name (with a red arrow pointing to the "Delete row" button)
- Field 17: Part Serial Number (with a red arrow pointing to the "Delete row" button)
- Field 18: Supplier (with a red arrow pointing to the "Delete row" button)
- Field 19: Signature (with a red arrow pointing to the "Delete row" button)
- Field 20: Date (with a red arrow pointing to the "Delete row" button)
- Field 21: Reviewed By (with a red arrow pointing to the "Delete row" button)
- Field 22: Date (with a red arrow pointing to the "Delete row" button)
- Field 23: Customer Approval (with a red arrow pointing to the "Delete row" button)
- Field 24: Date (with a red arrow pointing to the "Delete row" button)
- Field 25: List Comments (with a red arrow pointing to the "Delete row" button)

The form also includes a "SAVE" button at the bottom right.



# AS9102 FAI Standard - Form 1

## 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 “#”.

<b>1. Part Number:</b> 312A3123-12	<b>2. Part Name:</b> Test Part	<b>3. Serial Number:</b> N/A	<b>4. FAIR Number:</b> 5298	
<b>5. Part Revision Level:</b> A	<b>6. Drawing Number:</b> 312A3123	<b>7. Drawing Revision Level:</b> A	<b>8. Additional Changes:</b> LSCP/RevA	
<b>9. Manufacturing Process Reference:</b> 123456-0001	<b>10. Organization Name:</b> LMI AEROSPACE ST. CHARLES - FOUNTAIN LAKES	<b>11. Supplier Code:</b> JIST07	<b>12. P.O. Number:</b> A11111/001	
<b>13. Detail FAI:</b> <input type="checkbox"/> <b>Assembly FAI:</b> <input checked="" type="checkbox"/>	<b>14. Full FAI:</b> <input checked="" type="checkbox"/> <b>Partial FAI:</b> <input type="checkbox"/> <b>Baseline Part Number (Including Revision Level)</b>			
<b>Reason for Partial:</b>			<b>AOG</b> <input type="checkbox"/> <b>FAA Approved</b> <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.				
<b>INDEX of part numbers or sub-assembly numbers required to make the assembly noted above.</b>				
<b>15. Part Number</b>	<b>16. Part Name</b>	<b>17. Part Serial Number</b>	<b>Supplier</b>	<b>18. FAIR Number:</b>
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 Standard - Form 1

## 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 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

1. Part Number	2. Part Name	3. Serial Number	4. FAI Number Customer FAI # Internal FAI Number ADD FAI Approved
5. Part Revision Level	6. Drawing Number	7. Drawing revision level	8. Additional Changes
9. Manufacturing Process Reference	10. Organization Name UAE AEROSPACE ST. CHARLES	11. Supplier Code	12. P.O. Number
13. Detail Part # Assembly FAI	14. Full FAI Partial FAI	Baseline Part Number including revision level	
Program: Lot of Programs	Reason for Partial FAI	Customer Part Number	

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.

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. FAI Number
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				
Delete row				

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.e: ☐ FAI Complete ☐ FAI not Complete ☐ Void ☐ Pass/Fail ☐ Select

Customer: UAE AEROSPACE

19. Signature	Signature	20. Date
21. Reviewed By	Save and close the FAI	22. Date
23. Customer Approval		24. Date

19. Comments

SAVE



## 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

## Form 2

Processing Certifications will include the part number, or 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 Standard - 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

Go to [View Mode](#) [Form 1](#) [Form 2](#)

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

1. Part Number	2. Part Name Test Part	3. Serial Number	Product Code	4. FAIR Number		
		007		4748		
5. Material or Process Name	6. Specification Number	7. Code	8. Supplier	9. Customer Approval Verification	10. Certificate of Conformance number	Data Card Reference Work Instruction
<b>Material</b>						
				N/A *		
				N/A *		
				N/A *		
				N/A *		
				N/A *		
				N/A *		
<b>Process</b>						
				N/A *		
				N/A *		
				N/A *		
				N/A *		
				N/A *		
				N/A *		
<b>Inspection</b>						
				N/A *		
				N/A *		
				N/A *		
				N/A *		
				N/A *		
				N/A *		
<b>11. Functional Test Procedure Number</b>						
<b>12. Acceptance report number</b>						
<a href="#">+ Add New Row</a>						
13. Comments						
14. Signature		Signature		15. Date		

Documents:  
[\(Remove\)](#)

[Print Report](#)

[Go to View Mode](#) [Form 1](#) [Form 2](#)

SAVE

# AS9102 FAI Standard - Form 2

## Column 6: Specification

Enter material or process specification, **including Specification revision level and 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 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.

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

Go to [View Mode](#) [Form 1](#) [Form 2](#)

1. Part Number Test	2. Part Name Test Part	3. Serial Number 007	Product Code	4. FAIR Number 4748	5. Material or Process Name	6. Specification Number	7. Code	8. Supplier	9. Customer Approval Verification	10. Certificate of Conformance number	Data Card Reference Work Instruction
Material											
				N/A *							
				N/A *							
				N/A *							
				N/A *							
				N/A *							
Process											
				N/A *							
				N/A *							
				N/A *							
				N/A *							
				N/A *							
Inspection											
				N/A *							
				N/A *							
				N/A *							
				N/A *							
				N/A *							
11. Functional Test Procedure Number											
12. Acceptance report number											
+ Add New Row											
13. Comments											
14. Signature											
15. Date											

Documents:  
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[Print Report](#)

[Go to View Mode](#) [Form 1](#) [Form 2](#)

SAVE

# AS9102 FAI Standard - Form 2

## 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 ...).

AS/EN/SJAC9102 Rev B First Article Inspection

Go to [View Mode](#) [Form 1](#) [Form 2](#)

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

1. Part Number Test	2. Part Name Test Part	3. Serial Number	Product Code	4. FAIR Number	5. Material or Process Name	6. Specification Number	7. Code	8. Supplier	9. Customer Approval Verification	10. Certificate of Conformance number	Data Card Reference Work Instruction
Material											
									N/A *		
									N/A *		
									N/A *		
									N/A *		
									N/A *		
Process											
									N/A *		
									N/A *		
									N/A *		
									N/A *		
									N/A *		
Inspection											
									N/A *		
									N/A *		
									N/A *		
									N/A *		
									N/A *		
11. Functional Test Procedure Number											
12. Acceptance report number											
+ Add New Row											
13. Comments											
14. Signature											
15. Date											

Documents:  
(Remove)

Print Report

Go to [View Mode](#) [Form 1](#) [Form 2](#)

SAVE

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

The functional test certificate indicating that test requirements have been met.

NOTE: Enter "N/A" if no data.

Enter Comments as applicable.

[illegible]

## 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.

## Form 3

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 Standard - Form 3

**Box 1, 2, 3 & 4 and Sheet Number(s):**  
Net-Inspect will automatically fill in these

## 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.

**[See next sheet for Column 6 Examples]**

AS/EN/SJAC9102 Rev B First Article Inspection Sheet 1 of 1

Sheet  Or Char No.

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[Form 2](#)

**Form 3 Characteristic Accountability, Verification and Compatibility Evaluation**

1. Part Number	2. Part Name	3. Serial Number	4. FAIR Number
Test	Test Part	007	4748

Characteristic Accountability				Inspection / Test Results			14. Additional Data/Comments <a href="#">Add/Edit</a>
5. Char. No.	6. Reference Location	7. Characteristic Designator	8. Requirement *	9. Results Bulk Entry Template <a href="#">Bulk Entry</a>	10. Designed / Qualified Tolerancing	11. Nonconformance Number	
1*	Bubble No.		GDT Callout Actual Requirement Units ( )	Variable *			
Op#				<a href="#">add more results</a>			
Comments:							
2*	Bubble No.		GDT Callout Actual Requirement Units ( )	Variable *			
Op#				<a href="#">add more results</a>			
Comments:							
3*	Bubble No.		GDT Callout Actual Requirement Units ( )	Variable *			
Op#				<a href="#">add more results</a>			

The Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.

12. Signature  [Signature](#) 13. Date

[Documents](#)  
[\(Remove\)](#)

[Print Report](#)

[Go to View Mode](#) [Form 1](#)  
[Form 2](#)

\*The field 8, "Requirement" should be in either of the following formats:  
 1. FeatureDescription (specification +/-HighTolerance) Ex: Turning (10 +/-0.01) OR (10 +/-0.01)  
 2. FeatureDescription (specification +HighTolerance/-LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)  
 3. FeatureDescription (specification +HighTolerance/LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)  
 4. FeatureDescription (Lower specification - Upper specification) Ex: Turning (10.01 - 10.02) OR (10.01 - 10.02)  
 5. Description (=+ Specification) Ex: Profile of a Surface (=+ 0.02)  
 6. Description (> Specification) Ex: Profile of a Surface (> 0.02)  
 7. Description (< Specification) Ex: Profile of a Surface (< 0.02)  
 8. Description (<= Specification) Ex: Profile of a Surface (<= 0.02)  
 9. Unit of measurement can be specified after  
 \*FeatureDescription (specification +/-HighTolerance) in the Actual Requirement field. Ex: Turning (10 +0.01/-0.02) UNITS=IN OR (10 +0.01/-0.02) UNITS=MM

[SAVE](#)

# AS9102 FAI Standard - Form 3

## 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 Standard - Form 3

## 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.

[See next sheet for Column 8 Examples]

AS/EN/SJAC9102 Rev B First Article Inspection Sheet 1 of 1

Sheet  Of Char No.  [Go to View Mode](#) [Form 1](#) [Form 2](#)

### Form 3 - Characteristic Accountability, Verification and Compatibility Evaluation

1. Part Number	2. Part Name	3. Serial Number	4. FAIR Number
Test	Test Part	007	4740
5. Char. No.	6. Reference Location	7. Characteristic Designator	8. Requirement *
Inspection / Test Results			
9. Results Bulk Entry Template Bulk Input	10. Designed / Qualified Tooling	11. Manufacture Number	12. Addition of Data/Comments Add/Edt
1 <sup>st</sup>	Bubble No.	QTY / Lot	Variable *
Qty		Actual Requirement Units	
Comments:			
2 <sup>nd</sup>	Bubble No.	QTY / Lot	Variable *
Qty		Actual Requirement Units	
Comments:			
3 <sup>rd</sup>	Bubble No.	QTY / Lot	Variable *
Qty		Actual Requirement Units	
Comments:			
The Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.			
12. Signature	Signature		13. Date
<a href="#">Documents:</a> <a href="#">Remove</a> <a href="#">Print Report</a>			

\*The field 8. "Requirement" should be in either of the following formats:  
 1. Feature/Description (specification +/-HighTolerance) Ex: Turning (10 +/-0.01) OR (10 +/-0.01)  
 2. Feature/Description (specification HighTolerance-LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)  
 3. Feature/Description (specification HighTolerance-LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)  
 4. Feature/Description (Lower specification - Upper specification) Ex: Turning (10.01 - 10.02) OR (10.01 - 10.02)  
 5. Description (>= Specification) Ex: Profile of a Surface (>= 0.02)  
 6. Description (> Specification) Ex: Profile of a Surface (> 0.02)  
 7. Description (< Specification) Ex: Profile of a Surface (< 0.02)  
 8. Description (=< Specification) Ex: Profile of a Surface (=< 0.02)  
 9. Unit of measurement can be specified after  
 \*Feature/Description (specification +/-HighTolerance) in the Actual Requirement field. Ex: Turning (10 +/-0.01/-0.02) UNITS=IN OR (10 +/-0.01/-0.02) UNITS=MM

[SAVE](#)

## Column 8: Requirement - Examples

A flag note in the PL states that flange heights should be within +/- .01 The flange height S/B .75; The requirement in the FAI should then be written as “.75 +/- .01

For tooling-controlled features (MTX, form block, set-back router jig, etc.), list the tool used to inspect and list the tolerance afterwards. **Ex: “Contour per HPB  $\pm$  .03”**

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

5X .098 - .103

.25R TYP

R .50 4Places

**NOTE:.** Any general notes or flag notes for a specific dimension or feature shall be listed on Form 3. It is acceptable to reference back to Form 2 for special process results. Notes that do not apply to the FAI part should be listed on Form 3 as N/A.

# AS9102 FAI Standard - Form 3

## 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 “add more results” button in Net-Inspect on Form 3.

GDT Callout		Attribute <input type="text" value="v"/>	
Actual Requirement Units		PASS	VISUAL
(NA)			
		Last Updated By add more results	

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.

[See next sheet for Column 9 continuation]

AS/EN/SJAC9102 Rev B First Article Inspection

Sheet 1 of 1

Sheet  Or Char No.

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Form 3 - Characteristic Accountability, Verification and Compatibility Evaluation

1. Part Number Test		2. Part Name Test Part		3. Serial Number 007		4. FAIR Number 4740	
Characteristic Accountability				Inspection / Test Results			
5. Char. No.	6. Reference Location	7. Characteristic Designer	8. Requirement *	9. Results Bulk Entry Template Bulk Input	10. Designed / Qualified Tooling	11. Nonconformance Number	12. Addition of Data/Comments Add/Edit
1*	Bubble No.		GDT Callout Actual Requirement Units ( )	Variable *			
Comments:							
2*	Bubble No.		GDT Callout Actual Requirement Units ( )	Variable *			
Comments:							
3*	Bubble No.		GDT Callout Actual Requirement Units ( )	Variable *			
Comments:							

The signature indicates that all characteristics are accounted for, meet drawing requirements or are properly documented for disposition.

12. Signature	Signature	13. Date
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[Documents](#)

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Go to [View Mode](#) [Form 1](#) [Form 2](#)

\*The field 8. "Requirement" should be in either of the following formats:

- Feature/Description (specification +/-HighTolerance) Ex: Turning (10 +/-0.01) OR (10 +/-0.01)
- Feature/Description (specification HighTolerance/LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)
- Feature/Description (specification HighTolerance/LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)
- Feature/Description (Lower specification - Upper specification) Ex: Turning (10.01 - 10.02) OR (10.01 - 10.02)
- Description (= Specification) Ex: Profile of a Surface (= 0.02)
- Description (> Specification) Ex: Profile of a Surface (> 0.02)
- Description (< Specification) Ex: Profile of a Surface (< 0.02)
- Description (≤ Specification) Ex: Profile of a Surface (≤ 0.02)
- Unit of measurement can be specified after

Feature/Description (specification +/-HighTolerance) in the Actual Requirement field. Ex: Turning (10 +0.01/-0.02) UNITS=IN OR (10 +0.01/-0.02) UNITS=IN

SAVE

# AS9102 FAI Standard - Form 3

## Column 9: Results - continuation

**Example of a result with a range:** A .75 flange running .72 at bottom and .76 at top should be listed with the range of as **“.72”** and **“.76”**. A note can be placed in the Comment portion of the Characteristic explaining that the values represent the range.

All resulting measurements shall be listed in the same units of measure as indicated on the drawing.

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).

For processes that require verification per Designed/Qualified Tooling, results shall be accept or a range of value relative to the method of verification.

*Ex: For verification with Designed Tooling such as a Check-fixtured vs. gap/profile req't, Block 9 should depict the range of measurement (such as, **“.010 to .015”**).*

*Ex: For verification with Qualified Tooling such as a ¼-28 UNJF Thread Gage, Block 9 should be **PASS**.*

NOTE: be sure to post the Gage or Tool, and its identification number, in Column 10

## Column 9: Results - continuation

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

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

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, 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 specific values for requirements and actual results.



# AS9102 FAI Standard - Form 3

## 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.

AS/EN/SJAC9102 Rev B First Article Inspection

Sheet 1 of 1

Sheet  Of Char No.

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Form 3 - Characteristic Accountability, Verification and Compatibility Evaluation

1. Part Number		2. Part Name		3. Serial Number		4. FAIR Number	
Test		Test Part		007		4748	
Characteristic Accountability				Inspection / Test Results			
5. Char. No.	6. Reference Location	7. Characteristic Designer	8. Requirement *	9. Results Bulk Entry Template	10. Designed / Qualified Tooling	11. Nonconformance Number	14. Addition of Data/Comments Add/Edit
1*	Bubble No.		GDT Collect Actual Requirement Units ( )	Variable *			
2*	Bubble No.		GDT Collect Actual Requirement Units ( )	Variable *			
3*	Bubble No.		GDT Collect Actual Requirement Units ( )	Variable *			

The Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.

12. Signature  Signature

13. Date

\*The field 8. "Requirement" should be in either of the following formats:

1. Feature/Description (specification +/-HighTolerance) Ex: Turning (10 +/-0.01) OR (10 +/-0.01)
2. Feature/Description (specification HighTolerance/LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)
3. Feature/Description (specification HighTolerance/LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)
4. Feature/Description (Lower specification - Upper specification) Ex: Turning (10.01 - 10.02) OR (10.01 - 10.02)
5. Description (= Specification) Ex: Profile of a Surface (= 0.02)
6. Description (> Specification) Ex: Profile of a Surface (> 0.02)
7. Description (< Specification) Ex: Profile of a Surface (< 0.02)
8. Description (≤ Specification) Ex: Profile of a Surface (≤ 0.02)
9. Unit of measurement can be specified after

Feature/Description (specification +/-HighTolerance) in the Actual Requirement field. Ex: Turning (10 +0.01/-0.02) UNITS=IN OR (10 +0.01/-0.02) UNITS=IN

SAVE



# AS9102 FAI Standard - Form 3

## 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)

9. Results Bulk Entry Template Bulk upload	10. Designed / Qualified Tooling	11. Nonconformance Number	14. Additional Data/Comments
Variable ▾			
.7989	N/A		Gage Used CALIPERS 0000654
Last Updated By add more results			

AS/EN/SJAC9102 Rev B First Article Inspection

Sheet 1 of 1

Sheet  Of Char No.

Go to View Mode Form 1 Form 2

### Form 3 - Characteristic Accountability, Verification and Compatibility Evaluation

1. Part Number	2. Part Name	3. Serial Number	4. FAIR Number
Test	Test Part	007	4740
Characteristic Accountability		Inspection / Test Results	
5. Char. No.	6. Reference Location	7. Characteristic Designer	8. Requirement *
9. Results Bulk Entry Template Bulk upload	10. Designed / Qualified Tooling	11. Nonconformance Number	14. Additional Data/Comments Add/Edt
1 <sup>st</sup>	Bubble No.	GDT Collect	Variable *
Op#		Actual Requirement Units	
Comments:			
2 <sup>nd</sup>	Bubble No.	GDT Collect	Variable *
Op#		Actual Requirement Units	
Comments:			
3 <sup>rd</sup>	Bubble No.	GDT Collect	Variable *
Op#		Actual Requirement Units	
Comments:			

The Signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.

12. Signature  Signature

13. Date

Documents:

(Remove)

Print Report

Go to View Mode Form 1 Form 2

\*The field 8. "Requirement" should be in either of the following formats:

- Feature/Description (specification +/-HighTolerance) Ex: Turning (10 +/-0.01) OR (10 +/-0.01)
- Feature/Description (specification HighTolerance-LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)
- Feature/Description (specification HighTolerance/LowTolerance) Ex: Turning (10 +0.01/-0.02) OR (10 +0.01/-0.02)
- Feature/Description (Lower specification - Upper specification) Ex: Turning (10.01 - 10.02) OR (10.01 - 10.02)
- Description (>= Specification) Ex: Profile of a Surface (>= 0.02)
- Description (> Specification) Ex: Profile of a Surface (> 0.02)
- Description (< Specification) Ex: Profile of a Surface (< 0.02)
- Description (≤ Specification) Ex: Profile of a Surface (≤ 0.02)
- Unit of measurement can be specified after

Feature/Description (specification +/-HighTolerance) in the Actual Requirement field. Ex: Turning (10 +0.01/-0.02) UNITS±IN OR (10 +0.01/-0.02) UNITS±IN

SAVE

# AS9102 FAI Standard - 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 Standard - FAI Package

## ***FAI PACKAGES SHALL INCLUDE THE FOLLOWING AS APPLICABLE WITH TRACEABILITY TO THE FAI:***

Bubble drawing, model screen shot or sketch denoting design characteristics / parts list showing all 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 Standard - FAI Package

## ***FAI PACKAGES SHALL INCLUDE THE FOLLOWING AS APPLICABLE WITH TRACEABILITY 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 by Customer, refer to Appendix A herein for specific requirements.
- 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 Standard - Pass-Through Parts

**Pass-Through Product:** *A part(s) where SNA holds a customer PO for delivery but has no role in its production. The product is manufactured completely at a source outside of the SNA facility.*

SNA is responsible for providing a FAI Report to its customers for all parts on PO. For Pass-Through parts, SNA will receive the part(s), create a cover FAI and deliver the part & FAI to the customer.

To facilitate that effort, the following information will assist in attaining a standard method that meets the customers' and AS9102 requirements:

**Step 1:** the SNA facility holding the PO for the Pass-Through product will initiate FAI Form 1, in Net Inspect.

The difference in completing Form 1 is that the SNA 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.).

# AS9102 FAI Standard - Pass-Through Parts

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 information is being presented as a “best practice” for compliance to AS9102, in this scenario. The customer may mandate a different approach, which will take precedence over this section.**

# AS9102 FAI Standard - Pass-Through Parts

## Best practice for the creation of a Pass-Through FAI

**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:** Pass Through parts generally do not have a work order/traveler issued. Therefore, it is acceptable to use the SNA PO/Line Item to the Supplier as the traceable number.

**Field 14:** Enter Select **Full FAI**

**Field 11:** Enter the Customer's assigned Supplier Code for the appropriate SNA 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				
<b>Form 1: Part Number Accountability</b>				
1. Part Number Test	2. Part Name Test Part	3. Serial Number N/A	4. FAIR Number 4718 Internal Fair 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/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"/>	Baseline Part Number including revision level		
Reason for Partial FAI:		Customer Part Number		
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				

# Best practice 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 Form 1 – see previous slide).

[illegible]



## **Review of the FAIR**

The FAI Report review will be performed in accordance with the requirements of AS9102 and 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 Standard

## ♦ **Aviation Partners Boeing** (*APBP140-1, Q18, Rev 06/06/2022*)

- o Suppliers shall submit a FAIR process plan to APB QA for review and approval in lieu of submitting every FAIR. The FAIR process plan must show how all FAIR requirements of this Quality Plan are fulfilled. In lieu of an approved APB FAIR Process Plan, suppliers shall furnish copies of their FAIR's along with process and material certifications for each part and assembly produced.

## ♦ **Bell Helicopter Products & Programs** (*SQRM-001 Rev. F and Bell Supplier FAI Guidelines for AS9102 Rev B* (see [\\Nas\quality\Specifications\Bell](#) for these documents)

- o Supplier FAI Report and associated certifications/documents shall be uploaded to the Enovia FAI application in the Sell2Bell portal prior to part shipment per the requirements noted below or as required by purchase order. FAI Reports provided to Bell shall use AS9102 required format. Use of various form media, e.g., Excel, Lotus, FAI software, etc., is allowed and shall also include the following additional information:
  - Bell purchase order number for PO line-item FAIR; reference Form 1 Field 12.
  - Enovia Part Revision; reference Form 1 Field 5. FAI Report(s) shall be provided to Bell when following occurs:
    - Supplier's first-time shipment of the item.
    - Configuration/design change as defined by AS9102 requirements (re-accomplishment of a full report or a partial report for affected characteristics).
    - Two-year lapse in manufacturing (full report except dimensional layout inspection only for Castings, Forgings, or Extrusions).
    - Two-year lapse in delivery to Bell without above lapse in manufacturing (copy of most recent FAI Report for configuration of product being provided). FAI Reports provided to Bell for assemblies shall include FAI reports for Bell part numbered subassemblies and detail items.

◊ **Bell Helicopter Products & Programs** (*SQRM-001 Rev. F*) FAI Report for an assembly may contain sub-assembly and/or detail part items that are defined by the assembly. The resulting FAI Report must include all information required by AS9102 and this manual for each sub-assembly and/or each detail part item. The FAI Report must clearly identify which part number(s) are affected by each of the attributes and characteristics listed on AS9102 Form 2 and Form 3. The documentation provided with the FAI Report must identify which part numbers are associated with which documents.

- o FAI Reports provided for Bell part numbered items being supplied by a distributor, vendor managed inventory (VMI) or third-party logistics source shall reflect inspection performed by actual Bell approved manufacturer of the item.
- When a FAI provided to Bell is “not complete” (marked in field 19, Form 1 of AS9102) due to dispositioned nonconforming characteristic(s) 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.
- For FAI Reports required to be provided to Bell, an electronic copy of the reports and associated certifications and documents shall be uploaded to Bell through the [www.Sell2Bell.com](http://www.Sell2Bell.com) internet portal using software application (Enovia) provided by Bell.
- Supplier shall identify on shipping documents and on shipping container that FAI item is enclosed, and Supplier shall identify the FAI part by tag or other suitable method.
- Supplier shall maintain reports for FAI’s required to be performed but not required to be provided to Bell. These reports shall be made available to Bell for review upon request.

- **Boeing Products & Programs**

- **X31764 dtd 01 JAN 2024**

First Article Inspection/Boeing First Article Requirement (Flow-down to Supply Chain): Seller shall perform First Article Inspections (FAI) in accordance with AS/EN/SJAC 9102, Aerospace First Article Inspection Requirement. Boeing may allow alternate methods of meeting the FAI requirement provided Seller's plan is approved by Boeing's Supplier Quality Representative (SQR) prior to initiation of the activity (e.g., for installation level drawings or wiring). Boeing reserves the right to conduct surveillance of the Seller's FAI, referred to as Boeing First Article Inspection (BFAI). BFAI may include in-process inspections to be accomplished during performance of Seller's FAI. When a BFAI is required, Seller will be notified via the Supplier Quality supplier data system. Seller shall coordinate and schedule BFAI activity with Boeing's SQR prior to start of related procurement, manufacturing, and/or processing.

- **BCA Terms and Condition Quality Clause 6263**

Seller shall perform First Article Inspections (FAI) in accordance with AS/EN/SJAC 9102, Aerospace First Article Inspection Requirement. Buyer may allow alternate methods of meeting the FAI requirement provided the Seller's plan is approved by the Buyer's Supplier Quality Representative (SQR) prior to initiation of the activity (e.g. for installation level drawings or wiring). Buyer reserves the right to conduct surveillance of the Seller's FAI, referred to as Boeing First Article Inspection (BFAI). BFAI may include in-process inspections to be accomplished during performance of the Seller's FAI. When a BFAI is required, Seller will be notified via the Supplier Quality supplier data system. Seller shall coordinate and schedule BFAI activity with the Buyer's SQR prior to start of related procurement, manufacturing, and/or processing.

- **Boeing Products & Programs**

In the event a BFAI of the Seller's FAI is scheduled, supplier shall make available to the Buyer's SQR the following:

1. Applicable purchase document, material/process certifications, manufacturing and inspection records; including inspection plans developed to identify progressive inspection checkpoints for the FAI as a result of coordination and planning with Buyer's SQR
2. Applicable design data
3. Applicable documented configuration baseline and configuration summary
4. Applicable material review actions
5. Applicable acceptance and qualification test results
6. Applicable record(s) of Boeing approval for non-Boeing drawing and test procedures
7. Seller's First Article Inspection Report (FAIR), as defined by AS9102

- **BCA Terms and Condition Quality Clause 6263 (Continued)**

Seller shall maintain a copy of the closed FAI/BFAI record along with Seller's FAIR documentation.

Seller shall flow-down to its Supply Chain the FAI provisions/requirements set forth above. For purposes of this clause, "Supply Chain" means Seller's complete network of material, equipment, information, and services integrated into deliverable products and services provided to Seller by Seller's direct first tier supply contracts and Seller's sub-tier or lower tier supply contracts.

- **D6-87282 Para 8.5.1.3 Production Process Verification**

1.0 Supplier must perform First Article Inspections (FAI) in accordance with AS/EN/SJAC 9102, Aerospace First Article Inspection Requirement. Boeing reserves the right to conduct surveillance of the supplier's FAI, referred to as Boeing First Article Inspection (BFAI).

Supplier shall utilize, document completion and submit FAI within the Boeing licensed Net-Inspect software.

Furthermore, where Supplier is required to document FAIs in the Net-Inspect software, FAIs of the Supplier's supply chain shall also be documented in Net-Inspect.

Supplier and Supplier's supply chain are not permitted to ship product to customer until all applicable FAI requirements have been fulfilled.

- **Bombardier** (QD4.6-40, Section 8.5.1, Rev. 9, May 2019)

- Kits also require a FAIR – consisting of:
  - Actual configuration (kit number).
  - 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.
- FAIRs must be submitted using the electronic on-line FAIR system "Net-Inspect". Unless agreement for a different timeline was made with the relevant Quality representative responsible for the FAI acceptance, the FAIR must be submitted or the Quality representative be made aware of the FAIR readiness date, 10 working days prior to the shipping date. A decision to proceed with the Source Inspection, to issue a special authorization to ship or to provide a desktop customer approval for the FAI, will be made by Quality within 2 working days upon receipt of notice.
- To obtain access to the tool and training, contact Net-Inspect at: <http://www.net-inspect.com>. Net inspect is the only approved vehicle to submit FAIR unless otherwise authorized in writing by the Contract Authority.
- NOTE: For the Airbus program: The FAIR must include (in the comments box 13, Form 2) the actual weight and the last issue of the part, which can be located in the Part List of the drawing.

- ◇ **Daher** (PRO-STU-0143 Version 03)

10.1.3 The First Article is a process imposed on assemblies, sub-assemblies and detail parts (including castings, forgings, machined, composite, raw material cut to an engineering shape/part number, etc.). An acceptable first article product is a representation of those planned capable, and repetitive manufacturing processes and proven tooling which produce it. A complete FAI shall be submitted prior to shipment of product.

10.1.3.1. Daher requires its suppliers and their sub-tiers to create and submit all FAI's through the NET-INSPECT Portal, located at <https://www.net-inspect.com/>

## ♦Daher (PRO-STU-0143 Version 03)

10.1.4. An FAI product shall be a true representative of the designed manufacturing/fabrication process. Therefore, suppliers shall not use prototype parts, or parts manufactured using methods different from those intended for the normal production process, for the FAI. The “First Part” produced may not qualify as the First Article if changes to the process are made subsequent to its delivery. The FAI is to be completed when all process design changes have been validated and determined to be complete for serial production.

10.1.5. The supplier shall be able to demonstrate that the intent of FAI was successfully accomplished and show objective evidence thereof. The supplier shall ensure FAI’s submitted on behalf of sub-tier suppliers have been reviewed and are compliant with the requirements of this document.

10.1.6. Suppliers shall notify Daher if the first delivered unit does not represent the process(es) under which the subsequent production deliveries will be produced.

10.1.8. The requirement for First Article Inspection excludes supplied basic raw materials such as metallic plate/sheet, chemicals, fibers, fabrics, and outside processing services unless otherwise a part of approval processes administered by a Daher Customer

10.2.2.1. Prior to shipment of production parts, Daher suppliers are required to perform First Article Inspections in accordance with AS9102.

10.2.2.4. The characteristic identifier (ballooned drawing characteristic) shall be identified for all design characteristics, inclusive of specification characteristics and shall be used throughout the life-cycle of the product. Reference to the characteristic identifier is recommended for all documentation requirements of the specific identifier for traceability purposes. It is permissible for a specific designation for a drawing characteristic vs a specification characteristic such as D-1 for drawing, S-1 for a specification.



## Daher (PRO-STU-0143 Version 03)

10.2.3. Along with the First Article report, the supplier shall include “all supporting documentation” as required per Daher purchase order and/or Quality Requirement.

10.2.3.1. Supplier First Articles shall be submitted in accordance with Purchase order/quality requirements.

10.2.3.2. Unless otherwise authorized, a copy of the completed First Article Inspection Report shall be provided to Daher or its representative for review and approval.

10.2.3.3. The supplier shall retain the master First Article reports and associated data for review by Daher or its representative upon request.

10.2.3.4. With the exception of catalog or standard hardware, raw materials Certificates of Conformance (C of C) are not an acceptable substitute for full chemical and physical certification (mill certifications) on First Article Units. 10.2.3.5. For critical and other select parts, Daher may elect to have the supplier withhold their First Article submission to allow Daher Supplier Quality or its designated representative to conduct a verification of the First Article part and data at the supplier's production facility. Arrangements for this type of review will be addressed by a specific Daher Quality Assurance representative and shall be coordinated in advance between Daher and the supplier.

### 10.2.4. First Article Build Package

10.2.4.1. The FAI will not be considered complete until all build package issues are resolved. The build package consists of:

- Engineering,
- Specifications,
- Planning,
- Tooling,
- Purchase Order,
- Numerically Controlled Equipment Data (as applicable).
- Assurance that ALL design characteristics, inclusive of specification characteristics are identified, accounted for and have a traceable inspection method assigned to it for acceptance criteria.

## **Daher (PRO-STU-0143 Version 03)**

10.2.4.3. The FAI requirement shall continue to apply even after initial compliance. Partial or complete re-accomplishment of the FAI for affected characteristics is required for the following events:

Where feasible, the inspection method used for First Article should be different than the production method to aid in determination of variability in gaging.

- Variant in types of mechanical inspection devices may require a Gage R & R in addition to the FAI report to ensure that variability between gaging methods is identified and controlled.
- When required as part of a corrective action for a part number with repetitive rejection history (typically a part with three repeated rejections or as required by the customer).
- A change in numerical control program or translation to another media.

### 10.2.6. First Article Digital Product Definition (DPD)

10.2.6.1. When the engineering is based on Digital Product Definition the following guidelines shall be considered:

- All features that are defined by the 3-D model shall be included in the product acceptance plan and accounted for as part of the FAI documentation and identified with a characteristic identifier. The characteristic identifier shall remain assigned to the feature throughout the products lifecycle and per the records retentions requirements as defined in section 5.5 and the Daher Terms and Conditions document.

10.2.6.2. When the dimensional characteristics are not defined by either a standard linear tolerance or GD&T feature control frame on the face of the model, these features shall be defined in the parts list and/or notes on the drawing.

- Examples of un-dimensioned part characteristics include but are not limited to gage thickness, surface locations, and part periphery.

10.2.6.3. The FAI shall account for the entire engineering dataset (i.e., the general/flag notes, parts list, all features/characteristics per defined tolerances).

### 10.2.7. First Article Parts Shall be identified as First Article

10.2.7.1. To facilitate Daher identification and verification of First Article parts and data, suppliers shall identify the part tagging or packaging by a suitable means that conspicuously identifies the First Article part as such.

## **Daher** (PRO-STU-0143 Version 03)

10.2.7. First Article Parts Shall be identified as First Article 10.2.7.1. To facilitate Daher identification and verification of First Article parts and data, suppliers shall identify the part tagging or packaging by a suitable means that conspicuously identifies the First Article part as such.

## **Embraer** (*EQRS-Rev M, dated 12/2023, Section M.011.2018*)

- Supplier shall apply First Article Inspection (FAI) when changes occur in production and quality processes, in a modification or evolution of parts, in a new production, assembly line or Subtier.
- Note: SAE AS 9102 - Aerospace First Article Inspection Requirement may be used as a guide.



## **GKN** (SQA01 Issue 14, Quality requirements for suppliers to GKN Aerospace Services Cowes)

8.11.4 All FAIRs shall be submitted to the Company via Net-Inspect. Contact Net-Inspect at <http://www.net-inspect.com> to obtain access to this software and applicable familiarization training. Supporting Net-Inspect information may also be found at [www.gkncowes.co.uk](http://www.gkncowes.co.uk) ('Quality Documents > Supplier Guidance Material').

8.11.5. Any newly created FAIRs shall be uploaded into Net-Inspect for the Company's review and approval two (2) weeks prior to the Purchase Order due date of the affected product.

8.11.6. Products subject to FAI shall not be despatched to the Company until the FAIR has been formally approved by the Company in Net-Inspect and the Supplier has received confirmation of the FAIR approval.

8.11.9. For purchased kits, the Supplier shall perform FAIs for the kit and for each of the products within the kit. The individual FAIRs shall be linked to the kit FAIR within Net-Inspect.

8.11.11. The FAIR submission shall include copies of all relevant supporting documentation including but not limited to the following:

- (a) Company Purchase Order.
- (b) Company routing.
- (c) Drawing with the characteristics numbered in balloons on the Drawing.
- (d) Material certification (to include all chemicals used).
- (e) Supplier manufacturing process card.
- (f) Relevant specification pages.
- (g) Photo of part marking.
- (h) Supporting Sub-Tier FAIRs (meeting all of the requirements noted herein in Section 8.11 'First Article Inspection' including Certificate of Conformity).
- (i) A copy of SP6379: Weight Card (available at [www.gkncowes.co.uk](http://www.gkncowes.co.uk) under 'Quality Documents > Supplier Forms').
- (j) Any associated Concessions

## **Gulfstream** (AS9100 Quality System SQAR-0001, Section 5.22, Rev D)

5.22.1 First Article Inspection is required from a supplier either initially producing a product or implementing a configuration change on a Gulfstream or Supplier designed product. Changes to engineering or tooling which affect fit, form, function, interchangeability, safety, strength, performance, flight characteristics, weight, balance, service life or installation of the next assembly shall require a first article inspection for those changes.

5.22.2 One copy of the design drawing and all data pertaining to the first article inspection, shall accompany the first article delivered to Gulfstream. If the design drawing does not provide sufficient data to distinctly verify the configuration of incorporated software (identification number and version or modification), then the supplier shall also deliver nameplate or other drawings as necessary to enable verification of software configuration by Gulfstream Receiving Inspection. 5.22.3 First Article Inspection required data shall consist of, but not be limited to, the following:

- A. Material verification of type and condition.
  - B. All dimensional and angular characteristics including actual dimensions versus engineering dimensional callouts and tolerances. If a part has UN-dimensioned media (Mylar, electronic), the media used shall be recorded without dimensions.
  - C. Processes, NDT
  - D. Hardness / conductivity test results
  - E. Finish characteristics
  - F. Structural and functional tests to verify conformity to requirements.
  - G. Assembly of the product
- 5.22.4 All items manufactured to supplier's design will be subject to First Article Inspection as noted above, when the changes affect Gulfstream aircraft

- 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.

## **Gulfstream Supplier Quality Clauses - GA270 dated 10/2023**

- First Article Inspection Reports (FAIR's) must comply with AS9102 and any additional Gulfstream requirements and must be performed by the supplier at the supplier's facility and uploaded to Net-Inspect.com under "submitted" status prior to shipment.

NOTE 1: As of November 7, 2022, Gulfstream has transitioned to Net-Inspect.com for all supplier First Article Inspection Reports which is compliant to AS9102. Supplier must utilize Net-Inspect.com to document and upload supporting information for First Article Inspection Reports. Training on the use of the Net-Inspect process and additional guidance to address Gulfstream's minimum requirements (Form GA 5403) can be obtained at Net-Inspect.com.

NOTE 2: When uploading into Net-Inspect.com, please refer to the "Bill To:" section of your Gulfstream purchase order to identify the Gulfstream Plant Code (1005, 1006, 1101, 5005) and choose the appropriate plant code in the "To Division" section of Net-Inspect prior to submitting. Gulfstream Plant Codes other than 1005, 1006, 1101, 5005 do exist but are not utilized at this time and therefore are not currently selectable in the Net-Inspect application.

NOTE 3: A physical copy of the Certificate of Compliance for the final delivered part number identified on the Gulfstream purchase order must accompany each shipment separate from the First Article Inspection Report (FAIR) to individually satisfy Gulfstream Quality Codes 129 / 131 as assigned.

## **Honda Jet** (*HACI P 10-1, Rev G, para 5.23*)

5.23 First Article Inspection The supplier shall perform First Article Inspection (FAI) on each new article part number produced for HACI. For sub-assemblies or major assemblies, this includes an FAI for each detail contained within the assembly. The FAI shall be conducted and reported per the requirements of the latest revision of SAE AS9102 Aerospace First Article Inspection Requirement unless otherwise specified by HACI Quality Assurance. The supplier shall have a repository and tracking system in place for the FAI reports. The tracking system shall be closed-loop to the manufacturing planning process, such that any change to the article design or the manufacturing process shall trigger a new or partial FAI for the change.

The FAI shall be performed against the Part Number on the PO. For the Honda Aircraft Company Part Numbers (e.g. HJ1-11111-111-111, 1 can be any number) the supplier shall verify all requirements to the Honda Released Engineering posted on the Supplier Portal.

The supplier shall submit a copy of the latest FAI with the first delivery to each Honda Aircraft PO delivery location (i.e. Plant 3000, Plant 3100, Plant 8000, etc.)

## **Honeywell** (*SPOC Manual, Rev P, SPOC124*)

The following items are exempt from the requirements of this SPOC or Identify Honeywell Site Specific Requirements:

- Bar and sheet stock.
- Unaltered material consigned by or purchased from Honeywell Aerospace or its authorized distributors.
- Honeywell cage code parts that define a vendor item with no alterations/modifications to the vendor item. Honeywell specification controlled and 10- or 11-digit drawings should be evaluated to determine if they fall under this definition. While parts that meet this definition do not require a detailed FAIR, they shall be documented on form 1 of the AS9102 for all assemblies and/or lower-level FAIRs where they form part of the top-level assembly part number.\*

## **Honeywell** (*SPOC Manual, Rev P, SPOC124*)

- Commercial off the Shelf (COTS) parts. A COTS part is any item purchased from a catalogue available to the public and to which there is no further modification performed.\*
- Discrepant hardware either returned to the manufacturing supplier or sent to an alternate supplier and dispositioned rework or repair.
- Nonfunctional hardware (protective covers, shipping hardware, etc.), unless otherwise specified.
- Off the shelf sheet stock, unless post-milled processed.

### ADDITIONAL REQUIREMENTS

- Parts defined as data sets shall use Electronic Part Definition (Solid Model) to substantiate the dimensional requirements in accordance with SPOC 267. For United States-initiated Purchase Orders, when a first time FAIR is being conducted by a Supplier located outside of the United States, the Supplier shall notify the Honeywell Buyer to assure that proper notification is made to the FAA prior to FAIR completion.



# AS9102 FAI Standard

◇ **Honeywell** (SPOC Manual, Rev P, SPOC124)

**Table 1 – FAIR Event Table**

Event Description	FAIR type due	On-line First Article System	Honeywell / Customer FAIR Review Required	Note
New base part number or first time supplied by source	FULL	All	YES	
New dash number(s) issued and manufactured. See note	FULL	All	YES	Consult FQE to request partial FAIR per AS9102 If Honeywell approved Full / Baseline FAIR on other dash number(s)
The engineering drawing for the part receives a revision letter change and part has a Honeywell approved FAIR	PARTIAL	All	YES	
Current FAIR conditionally accepted based on Deviation, RMRA, Case Record, MRB or Manufacturing Revision authorizing rework or requirement modification	PARTIAL FAIR due on next lot manufactured or expiration of deviation / waiver	All	YES	
A change in process, material, tooling, or inspection method that can potentially affect form, fit, or function. This includes changes in Approved Sources For Controlled Processes since last approved Honeywell FAI, Reference SPOC 165.	PARTIAL	All	YES	SPOCs 110, 180 and/or Spec. may contain additional requirements
Change in SPOC 165 Special Process source since last Honeywell approved First Article.	PARTIAL	All	YES	SPOCs 110, 180 and/or Spec. may contain additional requirements
A change in manufacturing source or location of manufacturing equipment, including tooling transferred from another Supplier or division of the same supplier	FULL	All	YES	Consult FQE to request partial FAIR per AS9102
Two year (2) lapse in production	FULL	All	YES	Reference Table 1 Notes 1, 2, 3
Casting tool reaches Table 2 usage levels	FULL	All	YES	See 124.3

## Honeywell (SPOC Manual, Rev P, SPOC124)

### NOTES (Table 1):

1. The 1st tier supplier holding the Honeywell Purchase Order shall have the responsibility of assuring hardware manufactured internally and/or procured from their suppliers are maintained and are in compliance with the Two Year (2) lapse in production requirement in accordance with AS9102. Evidence of continued manufacturing may be requested by Honeywell either at the 1st tier Purchase Order Holders facility or at their sub-tier suppliers as applicable
2. For Stock / Inventory hardware that was manufactured and placed in inventory/stock at a supplier BEFORE the two-year lapse in production (and which was covered by a Honeywell-approved FAIR at time of manufacture), a full FAIR with FQE approval will be required for the next lot manufactured.
3. Unless otherwise specified by the Honeywell procuring site Quality Department or by specific purchase order text, a 2-year lapse in casting production will require the casting supplier to create a casting level partial FAIR. AS9102 forms 1 and 2 shall be fully completed forms with all supporting certifications attached—the same as if the supplier were executing a new FAIR. Form 3 needs to report only design characteristics that are not a direct product of the casting tool/pattern. Some examples are: dimensions which are straightened, added part marking, machining or targetting, gating removal, welding, or other features which were altered in the casting manufacturer's process. The partial casting FAIR Package shall be subject to approval by Honeywell FQE or authorized agent as defined elsewhere in SPOC 124

### 124.5. Approvals

When a FAIR is required per Tables 1 or 2, a Honeywell Field Quality Engineer (or a Honeywell-delegated authorized agent) is required to review FAIRs prior to hardware release. The Supplier shall notify a Honeywell Field Quality Engineer (FQE) at least two (2) weeks prior to the anticipated completion of the FAIR for effective FAI scheduling. Casting or forging part numbers that require controlled sources due to fixed process requirements shall be reviewed at the casting or forging source. Casting and Forging purchasers shall flow down this requirement in Purchase Order text. Except as stated above, Field Quality Engineers normally will not be dispatched to perform FAIR validations of sub-tier supplied product, however, Honeywell reserves the right to perform on-site sub-tier FAI audits to confirm conformance with part requirements. Contact buyer as needed to determine assigned FQE.

## **Honeywell** (*SPOC Manual, Rev P, SPOC124*)

### 124.6 Documentation and Records

Unless otherwise specified by the procuring site, a Honeywell-stamped FAIR approval form (AF 0113 or equivalent) shall be retained by the Supplier with the FAI documentation. FAIR's submitted using the Net Inspect system meet this requirement. For FAIRs that do not require customer review the supplier-approved AS9102 forms shall be retained. All documents used to support the review and approval of a FAIR are considered part of the FAIR package and shall be retained by the supplier per Quality Records defined in Section 1. Retention of FAIR Records Exception: FAIR records may not be discarded as long as active shipments of the respective product are being made with ties/accountability back to that specific FAIR record. Retention of records using the Net Inspect system is considered to be an acceptable alternative. Honeywell reserves the right to request the FAI package at any time. When requested, the Supplier shall ensure that FAI documentation is provided within the time frame listed below. USA, Canada, Mexico or UK – 2 business days Outside of USA, Canada, Mexico or UK – 5 business days FAIRs shall be compliant with AS9102 and On-line First Article (Net Inspect) Instructions.

### 124.7 Last Article Inspection Report

In cases where a process or product is to be discontinued at a supplier, Honeywell may require a Last Article Inspection Report (LAIR) from the current supplier. This report is identical to a First Article Inspection Report (FAIR), and is provided by the supplier for one of their last production runs, or processing runs. Honeywell's designated electronic FAIR system is used for reporting, and the LAIR must be approved on site by a FQE or designee just as would a typical AS9102 First Article. Full or partial LAIR depends upon whether part of a production process, part of a set of processing operations, or a complete product is being moved. LAIR requirement will be communicated to the supplier via Honeywell PO. The LAIR will be reported in the Honeywell electronic FAIR system as a normal full FAIR (there is no LAIR designation).

# AS9102 FAI Standard

**Lockheed** (*Quality Clause Q2A, Rev 16, 06/29/2023*)

See Q2A for all LM FAI requirements - \\Nas\quality\Specifications\Lockheed

AS9102 includes direction to consider determination of the required objective evidence to be included in the FAIR for each design characteristic, including supporting documentation. Buyer requires the following minimum objective evidence documentation to be included within each FAIR package provided from Seller to Buyer:

1. Approved AS9102 compliant FAIR forms 1, 2 & 3
2. Approved Planning paperwork (e.g., shop traveler) showing the in-process verification steps of all PO-level product design characteristics. Any other Planning paperwork not related to the buy-off of these design characteristics is NOT required and may be extracted/redacted.
3. Ballooned documents identifying all Buyer design characteristics defined within the TDP (this includes a two-dimensional representation of any DPD requirements) and within any Condition of Supply portions of the PO
4. Applicable manufacturing plan approvals required by PO
5. Inspection reports to support Form 3 (e.g., NDI/NDT data, CMM report)
6. PO-level CoCs (both material and process as applicable)
7. Any photos for Buyer design characteristics that require visual verification
8. ATP results (as applicable)
9. Casting/forging approvals (as applicable) in next higher assembly level FAIR package
10. Weld maps (as applicable) in next higher assembly level FAIR package.

## Northrop Grumman Products and Programs *(SQAR Revision Date 4/27/2023; Section 3.1)*

### 3.1.1 General FAI Requirements

First Article Inspection (FAI) shall be performed in accordance with the requirements of AS9102 (“Aerospace First Article Inspection Requirement”) as per the revision level established at time of purchase order issuance and the following requirements.

FAI shall be performed **prior** to product acceptance and/or shipment to Northrop Grumman. FAI shall be completed to the ordered part number. If the supplier already has FAI documentation on file for the same part number and configuration of product noted in the purchase order and is still compliant with AS9102 for partial or re-accomplishment, a new FAI is not required.

Where product does not meet the intent of "first production run", as defined within AS9102, all product characteristics shall be inspected.

For Custom/Modified off-the-shelf assemblies and sub-assemblies, only the modification is subject to FAI.

Commercial off-the-shelf (Standard/Catalog Hardware items) are not subject to FAI.

### 3.1.2 Forms and Documentation

FAI Reports and supporting documents shall be retained at the supplier and provided at no cost to NGAS when requested. Refer to SQAR First Article Inspection Report Guide SG0181.

The following optional fields in the AS9102 FAI Report are considered mandatory for Northrop Grumman, all other fields should be completed in accordance with the form instructions.

- Form 1, Blocks: 11, 12, 21, 22, 23, 24
- All Conditionally Required (CR) fields on FAI Report Forms 2 and 3
- Include on Form 3, Verification of all measurable features/characteristic requirements outlined in all specifications (e.g., Finish Thickness, Autoclave Cure Cycle Requirements, NDT results – Conductivity, Sealant Fillets, Fastener Torque, Fastener Flushness and Electrical Bond, Pre-penetrant Etch, Ply Orientations, Grain Direction, etc.).
- Include and account for all Drawing Notes that are applicable to the FAI report Part Number.

## Northrop Grumman Products and Programs *(SQAR Revision Date 4/27/2023; Section 3.1)*

### 3.1.2 Forms and Documentation

All applicable characteristics from the engineering (e.g., drawings, Source Control drawings, specifications, Digital Product Definition (DPD), NGAS Inspect-To-Packages, Change Notices (CN), etc.) and PO shall be accounted for during the FAI planning. The method of documentation for this reconciliation shall follow the best practice of “ballooning” the drawings, specifications and other requirements and providing traceability of each characteristic to the FAI report. The “ballooned” documents shall become part of the FAI documentation package. Seller may propose and use alternate “ballooning” type methods that meet the intent to ensure results are traceable only upon approval from the Buyer’s Supplier Quality Field Engineer in writing.

The FAI Report will remain open (Not Complete) if Qualification Testing is required per engineering and not accomplished at time of FAI part verification. Reference in Functional Test Procedure Block of Form 2. The FAI will remain open (Not Complete) for missing data (e.g., Actual Results).

When required by Specifications or Contract requirements, the following Customer approvals shall be verified as part of the FAI process:

- Manufacturing Plans
- Interchangeable and Replaceable (I-R) Manufacturing Plans
- Nondestructive Testing Techniques
- Supplier Data Requirements List (SDRL) for Technical Drawings, Acceptance Test Procedure, and Qualification Reports
- Qualified Processor List (QPL)
- Engineering First Article Evaluations (EFAEs)
- PAL, Deviations/Waivers, as applicable

Ensure discrepancies and nonconformances discovered during the FAI are documented and dispositioned by the appropriate Material Review

## **Northrop Grumman Products and Programs** *(SQAR Revision Date 4/27/2023; Section 3.1)*

### **3.1.3 FAI Review and Approval**

No shipment will occur until the Northrop Grumman approval for FAI is completed and accepted (Form 1 Block 23 Customer Approval) for the below requirements.

Purchase Orders requiring Northrop Grumman Source Inspection or Northrop Grumman Source Surveillance shall request Northrop Grumman First Article Inspection approval for all FAIs including delta/partial FAIs.

Items requiring Northrop Grumman Receiving Inspection shall have the FAI document submitted with the first shipment.

**Qarbon** *(Supplier Quality Assurance Manual QA-MAN-0002 Rev C, 08/21/2024)*

## **7.1. First Article Inspection Requirements**

7.1.1 Qarbon Aerospace requires suppliers to conduct a First Article Inspection (FAI) on parts, assemblies, sub-assemblies, castings, forgings and raw material cut to a part number or engineering shape. The FAI process shall be in accordance with SAE AS9102 and SC-PRO-00.00.SQR11. The supplier will ensure FAIs conducted by their sub-tier suppliers are also compliant with these requirements. Additional First Article inspection requirements above and beyond SAE AS9102 may be imposed by Qarbon Aerospace.

7.1.2 The purpose of a supplier FAI is to ensure that all design characteristics of a deliverable product and its sub-components meet the design drawing, material, specification, and purchase order requirements.

Supplier FAIs shall not be conducted on prototype parts, or parts manufactured using methods different from those intended for the normal production process.

Suppliers must notify the Qarbon Aerospace Procurement representative if the first delivered unit does not represent the processes under which the subsequent production deliveries will be produced.

Suppliers that proceed at risk and produce products prior to acceptance of the First Article by Qarbon Aerospace shall not have recourse to recover losses resultant from a failed First Article. All costs associated with the result of a rejected supplier First Article produced at risk by the supplier, shall be borne by the supplier.

Suppliers can proceed without risk to themselves, at Qarbon Aerospace risk, only when the supplier is authorized in writing by the Qarbon Aerospace Quality Manager or designee. .



**Qarbon** *(Supplier Quality Assurance Manual QA-MAN-0002 Rev C, 08/21/2024)*

## 7.2. First Article Inspection Performance

7.2.1 Supplier must load FAIs in Net-Inspect and obtain approval from Qarbon Aerospace, or a Qarbon Aerospace authorized service provider, prior to shipment of the FAI part and subsequent production parts. Qarbon Aerospace reserves the right to request and obtain all documentation which supports the first article inspection.

7.2.2 Parts may also be re-inspected to support the validation of supplier First Article reports.

7.2.3 Qarbon Aerospace will notify suppliers upon rejection of their First Article and will coordinate with the supplier to resolve the issue(s). Resolution may require the supplier to resubmit complete or partial First Article data.

7.2.4 Suppliers may be required to provide a formal corrective action response in order to identify the reason the rejected First Article was not detected by the supplier's Quality system.

7.2.5 Suppliers are required to identify the part tagging or packaging by a suitable means that conspicuously identifies the First Article part as such.

## Sikorsky (Procure-2-011, 05-01-2023)

- Seller shall perform a First Article Inspection and submit a First Article Inspection Report (FAIR) as defined in the RMS Supplier FAI Requirements Document located in the Quality Assurance Section of the RMS Business Area Procurement Website <https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/rms.html>
- The Seller shall perform a first article inspection (Full or Partial) when required by the Purchase Order, or if any of the following conditions occur:
  - a.) First time product is manufactured for production and/or supplied to Lockheed Martin
  - b.) A change in the design affecting fit, form, function and/or interchangeability of the part
  - c.) A change in manufacturing source(s), process(es), inspection method(s), acceptance criteria, location of manufacture, tooling or materials
  - d.) A change in numerical control program or translation to another media that is utilized to produce end item parts
  - e.) A natural or man-made event, which may adversely affect the manufacturing process
  - f.) A lapse in production for two years, or as specified by the customer
  - g.) For MOTS (Modified Off-the-Shelf) or AID (Altered Item Drawing) items, FAI of the modified portion at a minimum is required.
- Except for bolts and bearings delivered to Sikorsky, the Supplier is not required to submit a First Article Inspection Report if delivering:
  - Rework or repair Purchase Orders not associated with a revision change
  - Parts or materials conforming to industry or national authority specifications, where all characteristics are identified by text description (for example, MIL-Spec parts governed by an active QPL).
  - COTS parts or raw materials

## Sikorsky (Procure-2-011, 05-01-2023)

- Seller shall verify that operations performed at Sub-tier(s) meet requirements and shall document them as part of the FAIR.
- Seller may utilize the most current version of AS9102 forms 1-3 for their First Article Inspection Report. Seller's own forms are permissible, provided they are equivalent to AS9102 forms. Preferred forms can be downloaded in Excel format from the Quality Assurance Section of the RMS Business Area Procurement Website (<https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/rms.html>)
- Seller shall retain the First Article Inspection Report and supporting documentation in accordance with the terms and conditions of the purchase order. Supporting documentation includes certificates of conformance for raw materials and special processes (as defined in the AS9100 specification and identified on the engineering drawing), drawings, and test/inspection reports.
- Seller shall upload the First Article Inspection Report during the "Ship-to LMC" process per section 3.14, unless otherwise directed by PO.
- For further instructions on Inspection Lot Attachments and Requesting FAIs please refer to Pages 69 and 80 respectively within the below link: <https://www.myexostar.com/wp-content/uploads/2022/06/LMP2P-Quality-Ship-To.pdf>

**Spirit** (*MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F*)

## 3.2 Spirit First Article Requirements

FAI's are required for details, sub-assemblies and assemblies manufactured to Spirit and their customer specifications. For assemblies, the assembly level FAI shall be performed on those characteristics specified on the assembly drawing or DPD.

Suppliers are to address all requirements on the FAI (e.g. drawing notes, dimensions on the drawing, multiple characteristics in GD&T Feature Control Frame, ZSP requirements or Condition of Supply (COS)).

FAI's are required to be completed at the Supplier's (manufacturer) facility, submitted into the Spirit AeroSystems Inc. Net-Inspect account and approved by Spirit Supplier Quality Assurance prior to shipment of parts.

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 NetInspect all electronic forms and applicable fields are required to be completed. PDF uploads in lieu of completing the required electronic fields and forms within Net-Inspect are not acceptable. Any deviations from using the Net-Inspect system and the process for FAI submittal will require prior written authorization by the, Director of Supplier Quality for the FAI activities of the delivery site.

Allowed Exception: For lower-level sub-tier to Spirit supplier FAI's manufactured prior to 2/2019, the pdf FAI can be attached to the supplier to Spirit FAI. The lower-level sub-tier supplier must be listed in fields 15-18 on Form 1. Form 1, Field 18 will note FAI report number and see attached. The date on the attached FAI must be dated including or prior to 2/1/2019.

All detail part FAI's within an Assembly are required to be linked and available within Net-Inspect and approved either internally or by the customer (depending on the P.O. requirement) prior to submitting the Assembly FAI to the customer.

An FAI is considered incomplete until all nonconformities are resolved. If the initial FAI includes documented nonconforming characteristics dispositioned by MRB, a subsequent Partial (Delta) FAI is required to provide data from the next production run as objective evidence that these features are being produced in compliance to engineering requirements. Any deviations from this clause will require prior written authorization by the Director of Supplier Quality for the FAI activities of the delivery site.

## Spirit (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

### 3.2 Spirit First Article Requirements

Verify part marking is legible, correct in content and size, and properly located per applicable specifications.

All forms shall be completed in English. Supporting documentation must be in English as well, including but not limited to shop routers. At a minimum, the supplier shall provide a line-by-line translation page of their shop routers with bi-lingual headers.

All documentation included in the FAI must be properly signed and dated.

FAI's that are disapproved for buyoff must be reviewed by the supplier, updated accordingly and resubmitted to the Customer for review all within the same FAIR number. Creating and submitting a new FAIR in lieu of fixing the issues identified within the original FAIR is not acceptable and will be rejected. All rejectable conditions should be addressed prior to resubmission. Any items that are not addressed will be rejected back to the supplier.

Any deviations from this standard will require prior written authorization by the Director of Supplier Quality, for the FAI activities of the delivery site. FAI review process is 7 business days, including the first day of submittal or resubmittal (FAI submittal date is the first day of the 7 business days.).

### 3.3 Partial/Delta First Articles

Partial FAI's are also known as Delta FAIs. This process shall be repeated, when changes occur that invalidate the original results.

FAI requirements may be satisfied by a previously approved FAI performed on identical characteristics of similar parts produced by the same production processes. All characteristics on the previously approved FAI must be conforming. When this process is used only address the affected and/or different characteristics e.g. Part Marking.

Examples:

- Exact opposite parts where a -1 has an approved FAI and a -2 is opposite, therefore a part number ending in -2 could be a partial FAI only capturing the differences.
- New part numbers created similar to a previous part number that has an already approved FAI, for example, a new -55 similar to a -5 except added two pilot holes. The partial FAI would capture the newly added holes.

♦ **Spirit** (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

### 3.3 Partial/Delta First Articles

Spirit suppliers shall perform a Partial (Delta) First Article in accordance with AS9102. A partial FAI will reference the previous configuration first article report. Partial FAI's should be hyperlinked within Net-Inspect to the previous/parent FAI on the DELTAS tab from within the partial FAI.

For supplier to Spirit pdf FAI's, for parts manufactured prior to 5/2010, complete Form 1 as a Partial FAI and attach the previous full PDF. Attach documentation for current deliverable part (including information to validate form 1 e.g. PO, ZSP, Drawing). The Baseline part number and revision field must include previous part number (including dash number), part revision level, and previous FAI report number. For example: 123X456789-10 Rev B, FAI 1234 – see full FAI attached in documents section.

FAI's completed after 5/2010 should have been completed electronically and within Net-Inspect on the Net-Inspect fields and forms, including all supporting documentation.

Previous sub-tier to Spirit supplier FAI's that were not completed electronically within Net-Inspect (only prior to 9/2019) can be attached to the supplier to Spirit FAI in NetInspect.

- Sub-tier to Spirit supplier FAI's manufactured prior to 2/2019 can be attached to the Spirit supplier FAI. The supplier must be listed in Fields 15-18 on Form 1 in the INDEX of part numbers. Form 1, Field 18 will note FAI report number and "see attached". The date on the attached FAI must be dated including or prior to 9/1/2019.
- FAI's after 2019 should have been completed electronically and within NetInspect on the Net-Inspect fields and forms and approved by the sub-tier supplier to Spirit and properly linked on Form 1, Fields 15-18 in the INDEX of part numbers.

Partial FAIs are required product produced after a two-year lapse in production to show no processes or characteristics have been affected. However, if product manufactured in a lot or batch prior to the two-year lapse in production/delivery, that product does not require a Partial FAI. As Spirit has already received and utilized this stock previously.

Partial FAI's do not require Spirit FAI Review for approval.

♦ **Spirit** (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

### 3.4 Digital Product Definition Requirements

When design requirements are in a DPD format and traditional 2D drawing information is not available for all applicable design requirements, DPD design characteristics required for product realization shall be extracted, verified, and included in the FAIR.

The organization shall:

- Establish a process to extract the applicable DPD design characteristics
- Extract the DPD design characteristics required for product realization
- Ensure the production, inspection and operations requiring verification have been completed as planned to achieve DPD design characteristics

Any derivative media used must be fully traceable back to the model or drawing as a standalone document.

### 3.5 Control of Records

The following supporting documentation is required in addition to any customer specified requirements as separate attachments within the FAIR:

Purchase Order

Bill of Material (additional examples include PL, RMPL and PSDL)

Bubbled Engineering Media

Material Certifications from the original manufacturer (including standards, sealants, paints, metals, plastics, and prepregs, etc.)

NOTE: If using a distributor, full certification trail shall be included back to the original processor and/or manufacturer of material. CoC's must reference traceability number (e.g., raw material test report number, compliance report number, CoC) as assigned by the original manufacture.

Parts and/or materials procured directly from Spirit shall be traceable through a Spirit provided CoC (Accommodation Sales CoC) (Boeing part numbers only)

Service Procurement CoC (to include lot/batch traceability)

Photo of Part Marking on/with FAI part approval

◇ **Spirit** (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

## 3.5 Control of Records

Acceptance Test Reports

Process Certifications (or internal work document)

Service Procured Non-destructive Inspections (NDI) reports

Production Planning/Shop Traveler/Work Instruction/Manufacturing Plan including evidence of compliance with the supplier's internal procedure (e.g. stamps and dates of operations performed)

Contractual Amendments

Supporting Inspection Documentation (examples include CMM, Faro Arm, PCM, or Mylar (adding a digital copy/photo of the PCM Mylar is acceptable)) with mapping

Copy of Nonconformance (must have engineering disposition and through Quality Assurance (QA) approval

For assembly FAIs: Detail FAI reports should be linked and available, within NetInspect

## 4.1 Form 1, Part Number Accountability

A. Field 1, Part Number ( R ) This field contains the number of the FAI part (e.g., part number listed on the purchasing documents, part number from the Bill of Material (BoM) or the manufacturing part number for internal parts when customer part number is not available).

Note: Supplier internally created synthetic or phantom part numbers are not allowed to be used on Form 1, Field 1.

Note: Part Numbers if not available within Net-Inspect at the time the FAI is created must be requested via Net-Inspect.

Note: This may not match the part mark. For example, Airbus requires a 14-digit part mark, but the 12-digit engineering part number is what will be entered in Field 1.

B. Field 2, Part Name ( R ) This field contains the name of the FAI part as identified in the engineering definition or purchase documents. Note: This could be found in the BoM. Spirit Europe additional requirement states Part Name MUST be as per schedule/BOM/PL.

C. Field 3, Serial Number ( CR ) This field contains the serial number of the product. Enter N/A in the field if the serial number is not available or not applicable. Note: Verification of the serialization requirement may come from different sources and may vary from customer to customer. (Example, Parts List, BOM, Digital Product Definition (DPD)/Model Based Definition (MBD) Notes Tree).



◇ **Spirit** (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

## 4.1 Form 1, Part Number Accountability

D. Field 4, FAI Report Number ( R ) This field contains the FAIR number that identifies the FAI.

E. Field 5, Part Revision Level (R) This field contains the latest part revision level that effects the FAI part. Note: The engineering revision listed in Field 7 does not always affect all parts contained in the engineering or DPD.

F. Field 6, Drawing Number (R) This field contains the Drawing number(s) or Digital Product Definition (DPD) dataset(s) associated with the FAI part.

Note: If information is from digital data, include file extension i.e. part number. CATPart or CAT.Product. Spirit Europe require schedule/BOM, P.L. & Rev to be recorded.

G. Field 7, Drawing Revision Level (R) This field contains the revision level of the drawing sheet or sheets and/or DPD dataset(s) associated with the FAI part. The revision should be in the same format as depicted in the engineering. (Example: Rev (No Change) (NC), - , -A-, etc.) Note: Revision must match engineering. “NC” is not acceptable unless the document states “NC”. Spirit Europe require schedule/BOM, PL & Revision to be recorded

H. Field 8, Additional Changes (R) This field contains the reference numbers of any document that authorizes a deviation from Drawing/DPD or engineering applicable to the part including the associated Rev Status/Date control associated with the document. These are changes that are incorporated in the product by the customer, but not reflected in the referenced drawing/DPD/part revision level. Example: change in design, engineering changes, manufacturing changes, deviation or exclusion from certain drawing requirements, etc. These documents include but not limited to Technical Notes (TN), Design Query Note (DQN), Spirit Specification Plans (SP), Condition of Supply (CoS), Subcontracted Parts – Revision Authorization and Transmittal (SPRAT) etc. (see section 3.5). Enter N/A in the field if no authorized deviation document exists. Note: Request for Assistance (RFA) or email responses to questions from the supplier are not to be considered authorization to deviate from documented engineering requirements. Spirit Europe requires ECN number & Rev to be recorded.

I. Field 9, Manufacturing Process Reference ( R ) This field contains the reference number that provides traceability to the Manufacturing Record of the FAI part.

Examples: Production Order Number, Router Number, Job Card, Work Order Number, Traveler Number, Electronic Work Instructions (EWI) Number Note: Additional information such as revisions, lot number, batch number, date code, or line number shall be included, as applicable, to provide traceability to the specific manufacturing lot.

♦ **Spirit** (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

## 4.1 Form 1, Part Number Accountability

J. Field 10, Organization Name ( R ) This field contains the name of the Organization that is performing the FAI.

K. Field 11, Supplier Code ( R ) This field contains the Supplier Code assigned to the supplier by Spirit and is identified on the purchase order document. Include all leading zeros.

L. Field 12, Purchase Order (P.O.) Number ( R ) This field contains the Purchase Order number. Provide line number when applicable. Note: For detail parts within an assembly the PO of the assembly that drives the original requirement should be listed in this field.

M. Field 13, Detail FAI/Assembly FAI ( R ) This field contains the appropriate check box that associates the product.

N. Field 14, Full FAI/Partial FAI ( R ) This field contains the appropriate check box to identify a full FAI or partial FAI. For a partial FAI, provide the baseline part number including revision level and if applicable, dash number and revision level and the reason. Partial FAI's created after 9/2019 should be linked to their parent/previous FAI to allow the partial on the DELTAS tab from within the partial FAI. If parent/previous FAI is not available to be linked on the DELTAS tab, the FAI should be attached in the Documents section of the current FAI, add "see attached" to the Baseline part number. Examples: changes in design, process, manufacturing location, reinspection of nonconforming characteristics from a previous FAI.

Baseline Part Number (including revision): provide the baseline part number (including the revision level) to which the partial FAI is performed

Reason for Partial FAI: Partial FAI's created after 2/2019 should be hyperlinked back to the Parent FAIR within Net-Inspect on the DELTAS tab.

Fields 15-18 are required if the part number in Field 1 is an assembly requiring lower-level details, sub-assemblies, or standard catalogue items to be installed into the assembly or to identify prior approved FAI/configuration performed on similar characteristics/identical means. For partial FAIs on assemblies, list only those details, sub-assemblies, or standard catalogue items affected by the change. If fields 15-18 are not applicable, enter N/A in each field.

Index of Part Numbers fields 15-18 are to be used to identify prior approved configuration e.g. an FAI completed by a lower-level sub-tier or previous similar-to FAI/configuration performed on similar characteristics/identical means.

♦ **Spirit** (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

## 4.1 Form 1, Part Number Accountability

O. Field 15, Part Number (CR) This field contains the Detail part number, or numbers included in the Assembly. It should also contain the standard catalogue hardware items, as listed on the BOM, Drawing, or DPD dataset.

Note: Boeing BAC Hardware does not meet the definition of Standard Catalogue or off the shelf COTS and requires an FAI.  
Note: Hardware are considered items like rivets, washers, nutplates, bolts etc.

P. Field 16, Part Name (CR) This field contains the part name of the Detail part(s), Sub-assemblies, or Standard catalogue items, as listed on the BOM, Drawing or DPD dataset.

Q. Field 17, Part Serial Number, Supplier (CR) Part Serial Number: This field contains the serial number of the detail or sub-assembly. Supplier: This field contains the applicable supplier that made the detail, sub-assemblies, or supplier that the standard catalog hardware or COTS were procured from.

Note: If, standard catalog hardware or COTS a manual entry is required including supplier name, city and state or country.

R. Field 18, FAI Report Number (CR) This field contains the FAIR number that is associated with the FAI details or sub-assemblies. Note: This may be an internal report number. Note: For Net-Inspect, the information annotated in fields 15 – 17 (including Supplier Field) must be exactly as defined on the detail or sub-assembly FAIR to ensure successful hyperlinking

Note: For standard catalogue items this field is reserved for the Certificate of Conformance (CoC) 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.

Field, Customer - Required This field contains the Customer and should be Spirit AeroSystems Inc.

Field, Program - Required This field contains the Program associated with the FAI part and/or as specified by the division receiving the FAI part.

Field, To Division – Required This field contains the specific Division that will be receiving the FAI part

## ♦ Spirit (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

### 4.1 Form 1, Part Number Accountability

S. Field 19, Signature ( R ) This field contains the printed name and signature of the person who prepared the FAIR. Check “FAI Complete”, if all characteristics are conforming. Check “FAI Not Complete”, if nonconforming characteristics are documented in accordance with AS9102, 4.4

Note: Electronic identification and signature are both acceptable. Net-Inspect Specific Field: Pass/Fail This field contains the selection for Pass or Fail. Select “Pass” if there are no documented nonconformance’s listed on Form 3. Select “Fail” if there are any features with documented nonconformances written against any design characteristics listed in Form 3. If there are documented nonconformance’s a follow-on partial/delta is required on the next shipment. FAI’s with documented nonconformances will be Conditionally Approved depending on engineering disposition. Reference: WI-SQ-5076, Supplier Quality First Article Inspection (FAI) Report Nonconformance Tracking Process Note: Verify that nonconformances have been dispositioned and closed by Spirit.

T. Field 20, Date ( R ) This field contains the date when field 19 was signed.

U. Field 21, Reviewed By (R) This field contains the printed name and signature of the person who reviewed and approved the FAIR for the organization performing the FAI.

Note: Electronic identification and signature are both acceptable. Reviewer of the FAI must be a different person/signature then listed on Form, 1 Field 19

V. Field 22, Date (R) This field contains the approval date of the FAIR.

W. Field 23, Customer Approval (R)

## ♦ Spirit (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

### 4.2 Form 2, Product Accountability – Material, Special Processes and, Functional

The function of Form 2 is used when material, special processes or functional testing is defined as a design requirement.

A. Field 1, Part Number ( R ) This field contains the number of the FAI part. (e.g., the Customer Part Number contained on the purchasing documents, the Part Number from the BoM or the manufacturing Part Number for internal parts when customer part number is not available.) Note: This should be the same as Form 1, Field 1.

B. Field 2, Part Name ( R ) This field contains the name of the FAI part identified in the engineering definition or purchase documents.

Note: This should be the same as Form 1, Field 2. Part Name must be as per schedule/BOM/P.L.

C. Field 3, Serial Number (CR) This field contains the serial number of the product. Enter N/A in the field if the serial number is not available or not applicable.

Note: This should be the same as Form 1, Field 3

D. Field 4, FAI Report Number This field contains the FAIR number that identifies the FAI. This may be an internal report number.

Note: This should be the same as Form 1,

Field 4 E. Field 5, Material or Process Name (CR) This field contains the name of the material(s) and Special Processes as identified by the title of the specification. The name should match the specification listed by the title of the specification that is listed in field 6.

Example: ALUMINUM ALLOY (2024) SOLUTION TREATED AND NATURALLY AGED (T3) CLAD SHEET AND STRIP 0,2 MM ( A ) 6,0 MM STANDARD SURFACE QUALITY CHEMICAL CONVERSION COATINGS FOR ALUMINUM AND ALUMINUM ALLOYS Note: For processes list only those processes that are identified as “special” by the specification custodian. Note: If additional Special Process customer support testing is requested per the SPP, Supplier Quality Manual, etc (e.g. temper inspection, Rockwell Hardness) needs to be bubbled and recorded on Form 3. See field 9. F.

Field 6, Specification Number (CR) This field contains the following: 1. Material specifications and material form (e.g., sheet, bar) for all materials incorporated into the FAI part (e.g., weld or braze filler). Material should be written as listed on BOM, DPD or Engineering Drawing or spec. 2. Special process specifications; including specific class and type used, if applicable, and permitted substitutions.

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## 4.2 Form 2, Product Accountability – Material, Special Processes and, Functional

3. If standard catalogue items (e.g., fasteners) or Commercial – Off – The – Shelf (COTS) are modified, then list that standard hardware or COTS item.

NOTE: Non-modified standard catalogue items shall be listed on Form 1, “Part Number Accountability”.

NOTE: Company designed standards such as Boeing BAC standards do not meet the definition of COTS or Standard Catalogue Items.

4. For processes and materials, the specification numbers are defined within the Engineering/Drawing/DPD. Specification numbers shall correspond to the actual specification name.

Examples: BACB30VT3-10CD AIMS 03-04-014 AIPS06-02-009

G. Field 7, Code (CR) Utilize the appropriate Customer approved list. For Boeing programs this would be the D1-4426 Process or Material Code, for Airbus programs this would be the Airbus Qualified Special Process List (QSPL), Airbus Qualified Parts List (QPL), Airbus Qualified Test Methods List (QTML) or Airbus Industrial Process List (AIPI). If this field is not applicable enter N/A.

H. Field 8, Supplier (CR) This field contains the Supplier code, Supplier name, full address and of the organization performing the special processes or the manufacturer supplying the material. Supplier name and address may be used, when supplier code is not available or not adequate for identification.

Note: Use the supplier code assigned to the supplier by the customer of the FAI part as defined by the purchase document or for Airbus Programs the ARP-ID assigned by Airbus.

Note: If a supplier outsources a special process, then list the information of the company that performs the special process including the applicable supplier code, company name, and full address.

I. Field 9, Customer Approval Verification (CR) Indicate if the special process(es) or material sources are approved by the customer. Enter “Yes” if approved; “No” if approval is required, but process source is not approved; or “NA” if customer approval is not required. Refer to the training material and applicable customer requirements for specific sources and/or approvals for example, D1-4426, QPL’s

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## 4.2 Form 2, Product Accountability –Material, Special Processes and, Functional

J. Field 10, Certificate of Conformance number (CR) This field contains the Certificate of Conformance (CoC) number (e.g., special process completion certification, raw material test report number, hardware compliance report number, traceability number).

For items required to be listed on form 2 this field is reserved for the Certificate of Conformance (CoC) number (e.g., special process completion certification, raw material test report number, hardware compliance report number, traceability number) assigned by the manufacturer or processor of the item. Distributor certs must contain this number as assigned by manufacturer

Note: A Purchase Order is not sufficient to satisfy this requirement.

K Field 11, Functional Test Procedure Number (CR) This field contains the functional test procedure number that is identified as a design requirement. Note: Functional test procedures are not an in-process check. The Functional Test Plan (FTP) or Acceptance Test Procedure (ATP) is clearly defined as a test procedure and is typically found in the drawing notes or Part List or BoM (PL/BoM) or DPD.

L. Field 12, Acceptance Report Number (CR) This field contains the functional test certification report number that indicates the test requirements have been met.

Note: If no report number is generated, refer to the production order for evidence of acceptance.

M. Field 13, Comments (O) Optional Entry – This field contains any comments as warranted. Required if applicable by a specific flow down requirement. For example, Airbus QMS requires the actual weight of the part to be entered into this field.

O. Field 14, Prepared By ( R ) This field contains the Printed name and signature of the person who prepared and approved this form. Signature indicates that all applicable materials, special processes, and functional testing are accounted for, meet requirements, are properly documented, and all associated nonconformance's are documented.

Note: Electronic identification and signature are both acceptable.

P. Field 15, Date ( R ) This field contains the completion date of the form



## ♦ Spirit (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

### 4.3 Form 3, Characteristic Accountability, Verification and Compatibility Evaluation

This form is used to record inspection results for the design characteristics and to document any applicable nonconformance (reference AS9102, 4.4).

- A. Field 1, Part Number ( R ) This is the number of the FAI part. (E.g., the Customer Part Number contained on the purchasing documents, the Part Number from the BoM or the manufacturing Part Number for internal parts when customer part number is not available.) Should be the same as Form 1, Field 1
- B. Field 2, Part Name ( R ) Name of the part (FAI Part) Should be the same as Form 1, Field 2. Spirit Europe additional requirement states Part Name must be as per schedule/BOM/PL.
- C. Field 3, Serial Number (CR) This field contains the serial number of the FAI part. Should be the same as Form 1, Field 3
- D. Field 4, FAI Report Number (R) This field contains the FAIR number that identifies the FAI. This may be an internal report number. Should be the same as Form 1, Field 4.
- E. Field 5, Characteristic Number ( R ) This field contains the unique assigned number for each design characteristic that is cross-referenced to all relevant documents (e.g. marked up drawing, Drawing Sheet, CMM Report, General Note, Flag Note and Geometric Tolerance). Verify that every design characteristic (requirement) is accounted for and uniquely identified.

Note: A single design callout that applies to multiple characteristics may be recorded as one characteristic number. Note: Datasets derived from MBD engineering may be used for characteristic mapping provided the organization is DPD approved in accordance with MAA1-10009-1, Quality Assurance Standard for Digital Product Definition at Spirit AeroSystems Inc. Suppliers.

- F. Field 6, Reference Location (CR) This field contains the location of the specific design characteristic (drawing zone, page number and section, DPD/MBD model location, specification callout, etc.) being verified. This field needs to provide traceability to the document/title to find the bubbled characteristics.

Note: The reference location must match where the identifier is found in the attached “bubbled” engineering media, screen shots, etc. Note: The bubbled document is used to provide traceability for the characteristic number to the location of the design characteristic



## ◇ Spirit (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

### 4.3 Form 3, Characteristic Accountability, Verification and Compatibility Evaluation

G. Field 7, Characteristic Designator (CR) This field contains the characteristic type. Record characteristic type e.g., critical items (see AS9100, 3.2), key characteristics (see AS9100, 3.3), flight safety (see AS9100, 3.4), and/or defined by customer (see AS9100, 3.5). Recording “Minor” in this field is not acceptable. Note: This designator is feature specific and is typically identified in the engineering definition. It does not include standard measuring equipment or feature type. It is preferred this field is left blank, if there is not a Characteristic Designator.

H. Field 8, Requirement ( R ) This field contains the specified requirement for the design characteristic and units of measure (e.g., drawing dimensional characteristics with associated nominal dimensions and tolerances included, drawing notes, specification requirements, etc.) Note: All requirements shall be recorded in the units of measure (e.g. inches, lbs, ohms) specified on the Engineering Definition, (drawing, DPD file or specification) unless otherwise approved by Spirit. Note: Dimensions that do not include tolerances, are reference only and refer to other dimensions that have a tolerance such as GD&T, stock thickness on a CoC, etc. Basic or reference dimensions may be omitted from the FAI. If they are recorded they must be recorded without a tolerance e.g. not reportable.

I. Field 9, Results ( R ) List the obtained measurements for the design characteristics. This field contains For multiple characteristics, verify that every design characteristic requirement is accounted for, uniquely identified and has inspection results traceable to each unique identifier. List each characteristic as individual values or list once with the minimum and maximum of measured values attained

Note: Basic or reference dimensions if recorded in field 8 must be recorded as Not Reportable in field 9. Note: When a characteristic is found to be nonconforming, then that characteristic shall be listed separately with the measured value noted. The supplier shall then submit a Supplier Nonconformance Notification (SNN). A fully executed QN must then be included with the FAIR prior to submission, review and conditional acceptance

♦ **Spirit** (MAA 1-10042-1, Rev P; MAA 1-10042-2, Rev F)

## 4.3 Form 3, Characteristic Accountability, Verification and Compatibility Evaluation

2. Attribute Data (e.g., pass/fail) may be used in lieu of Variable Data when:

- a. There is no inspection technique resulting in Variable Data is feasible.
- b. The Design Characteristic does not specify numerical limits.
- c. When Qualified Tooling (e.g., radius gauges) or Designed Tooling is used as a go/no-go gauge (reference AS9102, 4.7.3.b), record the results as an attribute (e.g., pass / fail)
- d. For characteristics verified by attribute inspection include statement of conformance (e.g., accept). Note: See section 1.3 of this document for the definitions of attribute data and variable data. 3. Parts that are validated by DPD datasets, (Coordinate Measuring Systems (CMS), Point Cloud, Faro Arm, scanning, etc.) must have the inspection results recorded on Form 3. The results on the reports must correlate directly with the characteristic identifiers on Form 3.

Note: Coordinate Measurement Machine (CMM) data alone would not be acceptable for a positional tolerance; the results shall show the actual positional value

Note: The CMM/Faro Arm report does not need to be bubbled, but does need to correspond to the engineering feature listed on Form 3 in the comments section (i.e. profile Bubble #17, See CMM report 92-114d).

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 enditem customer.

Note: When a laboratory report or certificate of test is included in the FAIR, then those results need not be written on the form. The laboratory report or certificate of test must be attached and show specific values for requirements and actual results.

4. For characteristics with visual verification requirements that are rated against standard photographs, list the photo number of the closest comparison

Note: A statement of conformance is acceptable (record the reference number in this field).

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### 4.3 Form 3, Characteristic Accountability, Verification and Compatibility Evaluation

5. For part marking, ensure that the marking is legible, correct in content and size and properly located in accordance with the applicable specification.
6. For processes that require verification per design characteristics, include a statement of conformance (e.g. certification of conformance, verification indicator - accept).

#### J. Field 10, Designed Tooling/ Qualified Tooling (CR)

Note: Please see section 1.3 of this document for the definitions of Designed Tooling, Qualified Tooling and Standard Measuring Acceptance Tooling.

When Designed Tooling is used for attribute acceptance of the characteristic, this field shall contain the tool identification number/program number.

When Qualified Tooling (e.g., radius gauges, pin gauges) is used for attribute acceptance, record the gauge value or range (e.g. minimum/maximum value) as applicable. All other standard measuring acceptance devices or method of inspection that does not meet the definition of Designed or Qualified tooling used for inspection shall be listed on Form 3 Field 14.

K. Field 11, Nonconformance Number (CR) This field contains the nonconformance number as assigned by the customer if the characteristic is found to be discrepant.

Note: A partial/delta FAI is required once the nonconformance has been eliminated and the supporting objective evidence has been approved by Spirit in the form of an approved 8D corrective action and a conforming part.

Note: Field 9 should have a Failing Value or Fail if there is a nonconformance.

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## 4.3 Form 3, Characteristic Accountability, Verification and Compatibility Evaluation

L. Field 12, Prepared By ( R ) This field contains the Printed name and signature of the person who prepared and approved this form. Signature indicates that all applicable materials, special processes, and functional testing are accounted for, meet requirements, are properly documented, and all associated nonconformance's are documented on AS9102 Form 3, "Characteristic Accountability, Verification, and Compatibility Evaluation".

Note: Electronic identification and signature are both acceptable.

M. Field 13, Date ( R ) This field contains the completion date of the form

N. Field 14, Additional Data / Comments (R ) Spirit AeroSystems Inc., requires that this field contain the standard measuring acceptance devices or method of inspection (caliper, micrometer, scale, height gauge etc.) or method of inspection (visual, cert, caliper, scale, isoscope, comparator etc.) used to inspect the product /feature to determine conformance. These tools should be calibrated and certified to measure to the level of precision and accuracy for the feature.

Note: Field 14, basic or reference dimensions are dimensions without tolerances, these are considered not reportable can omitted from the FAI. If they are included, they should be "Not Reportable." Additional fields can be required that are end item customer specific.

