AMT: Supplier FAI Requirements

References:

SAE AS9102, Rev. C (2023-06)

SAE AS9100, Rev. D (2016-09)

Net-Inspect build: 2025.02.10

AMT: Supplier FAI Requirements

Any deviations from this controlled document will require prior written authorization by AMT's Director of Quality.

First Article Inspection (FAI) - Overview:

Definition:

- First Article Inspection (FAI) is the planned, complete, independent, and documented inspection and verification process to ensure that prescribed production processes have produced an item conforming to engineering drawings, DPD, planning, purchase order, engineering specifications, and/or other applicable design documents.

Purpose:

- The purpose of an FAI is to verify and validate product realization processes are capable of producing characteristics that meet engineering and design requirements. A well-planned and executed FAI by a multi-disciplinary team (e.g., members from responsible functions) provides objective evidence that the manufacturer's processes can produce compliant product; having effectively understood and incorporated the associated requirements.

Application:

- This standard applies to organizations and their suppliers responsible for product realization processes that produce the design characteristics of a product. The organization shall flow down these requirements to suppliers who produce design characteristics.

First Article Inspection (FAI) - Overview:

An FAI Will:

- Provide confidence that product realization processes are capable of producing conforming product.
- Demonstrate the manufacturers and processors of the product understand associated requirements.
- Provide assurance of product conformance at the start of production and as changes occur throughout the production process.

Intent of an FAI:

- Mitigate risks associated with production startup and process changes.
- Reduce future escapes.
- Help ensure product safety.
- Improve quality, delivery, and customer satisfaction.
- Reduce costs and production delays associated with product nonconformances.
- Identify product realization processes not capable of producing conforming characteristics, and initiate and/or validate associated corrective actions.

Definitions:

- See AS9102C for additional terms and definitions.
- Attribute Data
  - A result from a characteristic or property that is appraised only as to whether it does or does not conform to a given requirement (e.g., go/no-go, accept/reject, pass/fail)
- Ballooned Design Characteristic
  - Clear and uniquely identified design characteristic indicated on a ballooned document.
- Ballooned Document
  - This refers to a part number from the previous FAI or approved configuration, including revision level, to which a partial FAI is performed. An example of an approved configuration is a part produced and verified as conforming product prior to the requirements of this standard.
- Design Characteristic
  - Dimensional, visual, functional, mechanical, and material features or properties, which describe and constitute the design of the product. These characteristics can be measured, inspected, tested, or verified to determine conformance to the design requirements as specified on the parts list, purchasing document, drawing, or DPD, to which the product is to be produced.
- Designed Tooling
  - Product specific tooling (e.g., check fixtures, CMM program) specifically made to validate the design characteristics of a product.

Definitions:

- DPD (Digital Product Definition)
  - Digital data file(s) that disclose, directly or by reference, the physical or functional requirements, including data files that disclose the design or acceptance criteria of a product. Examples of DPD include the following:
    - Digital data file(s) and fully dimensioned two-dimensional (2D) drawing sheets.
    - Three-dimensional (3D) data model and simplified or reduced content 2D drawing sheets.
    - 3D data model with design characteristics displayed as text.
    - Any other data files containing design characteristics that define a product in its entirety.
- Multiple Characteristics
  - Identical characteristics that occur at more than one location (e.g., four places), but are identified by a single set of drawing or DPD requirements (e.g., rivet hole size, dovetail slots, corner radii, chemical milling pocket thickness).
- Qualified Tooling
  - Universal (not part specific) calibrated monitoring and measuring equipment (e.g., go/no go gauges, thread gauges, radius gauges) used to validate product design characteristics using attribute data.
- Reference Characteristics
  - Characteristics **(including reference and basic dimensions)** that are used for “information only” or to show relationship; these are dimensions without tolerances and refer to other dimensions on the drawing or in the DPD.
- Special Processes
  - Any processes for production and service provision where the resulting output cannot be verified by subsequent monitoring or measurement and, as a consequence, deficiencies become apparent only after the product is in use or the service has been delivered.
- Variable Data
  - Quantitative measurements taken on a continuous scale (e.g., the diameter of a cylinder, the gap between mating parts)

AMT First Article Requirements

Any deviations from this controlled document will require prior written authorization by AMT's Director of Quality and must be noted on the AMT Purchase Order.

AMT First Article Requirements – Part Requirements

Part Requirements:

- An FAI is required on new product representative of the first production run.

- The organization shall use one or more representative items from the first production run of a new product to verify that the production processes, production documentation, and/or tooling have the capability to produce products that meet established requirements.

- FAIs are required for details, sub-assemblies, and assemblies manufactured on behalf of AMT and their customer specifications.
  - For assemblies, the assembly level FAI shall be performed on those characteristics specified on the assembly level engineering.
  - For detail parts, capture all detail part characteristics on the detail part FAI.
    - Detail parts created or modified during assembly may be accounted for on the assembly level FAI.

AMT First Article Requirements – Partial/Reaccomplishment FAI

Partial or Reaccomplishment of First Article Inspection:

- The original FAI requirement shall continue to apply after initial compliance.
- Supplier must evaluate changes to product realization processes or engineering/design requirements and create a partial (Delta) or full FAI to capture changes that invalidate or are not represented in the original results.
- When performing a partial FAI, requirements shall be satisfied by an FAI that addresses changes from the original FAI requirement, provided all other characteristics were conforming on the previous FAI and are produced by the original production processes.
  - Note: It is permissible to limit a partial (Delta) FAI to only the characteristics that were impacted by changes to engineering requirements or the production process.
- 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.
  - Record the base part number, including revision level, on Form 1, Field 14.

- The organization shall perform the aforementioned 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.
  3. A change in the numerical control program or translation to another media.
  4. A nature or man-made event, which can adversely affect the manufacturing process.
  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. This lapse is from the completion of the last production operation to the actual restart of production.
     - **A two year (or more) lapse in production requires a full First Article Inspection Report.**

AMT First Article Requirements – Handling Nonconformances

Handling Nonconformances:

- If a documented nonconformance occurs on an FAI, this is still considered a complete FAI. Complete the following steps to capture the nonconforming results:
  1. Reference the nonconformance document number on Form 3, Field 11.
  2. Check Yes on Form 1, Field 19.
  3. Email MO Updates with the following information:
     a) Part number
     b) Job #
     c) MRR/NCR #
     d) Rejected feature(s) or characteristic(s)
     e) Current state of part/feature (Was part reworked and bought off?)

- FAI requirements may be satisfied by reworking the FAI part and performing a partial FAI, or by performing a partial FAI on the next production run to capture previously nonconforming characteristics.

AMT First Article Requirements - DPD

DPD 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.

- Suppliers with AMT MBD/DPD (D6-51991) approval are approved to create dataset derivates (e.g., internal sketches) from the authority dataset. The authority dataset (model & revision) and tolerances, unless states in PL, must be clearly identified on the derivative.
  - These dataset derivatives can be used in lieu of the authority dataset to capture all implicit and explicit features, characteristics, notes, tolerances, etc.
  - All implicit and explicit engineering data must be captured.

AMT First Article Requirements – Capturing Engineering

All design characteristics from engineering sources must be captured and indicated with a unique identifier, typically by numbering the design characteristics (on Form 3) and putting a circle around or highlighting these characteristics on engineering documents. These records are defined as a ballooned/bubble drawing.

Capturing Engineering Requirements (as applicable):

- PO Driven Condition of Supply (COS)
  - Capture COS requirements from AMT Purchase Order on Form 1, Field 8 and as a design characteristic(s) on Form 3.
- Parts List, MPPL, or equivalent
  - Capture (at a minimum) all raw material requirements, finish notes, break sharp edges (or similar notes), surface roughness, part mark, and any other applicable data.
- PSDL
  - Bubble general notes specific to the detail or assembly, and all applicable flagnotes (capture on both drawing sheets and PSDL).
- Raw Material PL (RMPL)
  - Attach RMPL and capture raw material requirements if this is referenced on the part/assembly PL.
- Engineering Drawing (2D or 3D/DPD)
  - All implicit and explicit dimensions and characteristics applicable to the respective part must be bubbled and captured on Form 3, including all drawing notes and tolerances.
    - If a drawing view/section is shown in multiple zones on the drawing, capture all engineering requirements for that view/section for each zone in which it is indicated.
  - MBD/DPD documentation must show model, revision, and export control (ECCN) requirements in each screen capture used.
  - Reference or basic characteristics may be omitted from the first article inspection report.
- Specification Requirements
  - Capture all data required by applicable specification requirements.
- Internally Generated Drawings
  - Suppliers must have DPD/MBD approval from AMT in order to create and utilize internal drawings from MBD/DPD sources.
  - Derivative Datasets must have the Source Authority Dataset (source engineering) and Tolerances listed (unless stated on PL).

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AMT First Article Requirements – Capturing Engineering

Explicit and Implicit Engineering Data:

- Explicit Data is clearly stated and defined. Examples include:
  - Dimensions
  - Tolerances
  - Material Specifications
  - Surface Finish Requirements
  - Notes and Annotations

- Implicit Data is not directly stated but can be inferred from part specifications and other available data. Examples include:
  - Features that are not annotated
  - Additional part geometry (dimensions, tolerances, etc.) based on the alignment or arrangement of other features.
  - Inferences about fit or function.

AMT First Article Requirements - Evaluation

Evaluation of Completed FAIR:

Suppliers shall evaluate their FAIs to the extent described below prior to submitting to AMT:

- Review the manufacturing process documentation (e.g., routing, jobs/work orders, manufacturing or inspection plans, work instructions) to ensure all operations are complete as planned and call out the correct specification, material types, conditions, and approvals.
- Review supporting documentation for completeness.
- Verify the raw material and special process certifications (e.g., CofC, special process completion certification, raw material test report number, traceability number) call out the correct specification, material types, conditions, and approvals.
- Verified the use of customer approved sources.
- Review nonconformance documentation for completeness.
- Verify that required designed tooling (e.g. part specific gauges) are used.
- Verify that every design characteristic requirement, including DPD characteristics, is accounted for, uniquely identified, and has inspection results traceable to each unique identifier.
- Verify the design characteristics resulting from the output of the manufacturing process are measured, inspected, tested, or verified to determine conformance, including DPD characteristics.
- Verify part marking has met defined requirements, such as legibility, method, material, content, size, and location. (Refer to QS 40025 QC-12)

AMT First Article Requirements – Source Inspection

- If AMT Source Inspection (QC-05) has been invoked for the first production run of parts, the supplier is not authorized to inspect product(s) on AMTs behalf. The supplier shall schedule a comparable inspection and coordinate the required inspection / verification activity prior to shipment in accordance with QC-05 requirements. All requests for AMT Source Inspection must be submitted to AMT in advance of inspection support.
  - Reference QS40025, Supplier Quality Requirements

AMT First Article Requirements – Forms

An FAI Contains The Following Forms:

- Form 1: Part Number Accountability
  - Provides general part information & captures parts, sub-assemblies, and hardware used to make the FAI part/assembly.
- Form 2: Product Accountability
  - Captures material, special processes, and functional testing used to produce the FAI part/assembly.
- Form 3: Characteristic Accountability, Verification, and Compatibility Evaluation
  - Captures all design characteristics verified during the FAI and their associated results.
  - Each unique identifier must directly correlate with the characteristic on the bubble drawing.
- All forms and supporting documentation shall be completed in English, including shop routers.
  - When documentation is not completed in English, suppliers shall, at a minimum, provide a line-by-line translation of their shop routers with bilingual headers.

Navigating Net-Inspect

Any deviations from this controlled document will require prior written authorization by AMT's Director of Quality and must be noted on the AMT Purchase Order.

Navigating Net Inspect

- FAIs are required to be completed by AMTs suppliers and submitted into Net Inspect to customer ‘SENIOR AEROSPACE AMT – ARLINGTON’.

- For instructions on navigating Net Inspect, refer to the User Guide available from Net Inspect and the Net Inspect Support Center.
  - *Tip: Click the symbol beside items on Net Inspect FAIR forms for instructions on completing each field and navigating the system.*

- Detail/sub-assy part FAIs within an assembly are required to be linked and available within Net Inspect and approved internally prior to submitting the Assembly FAI to AMT (See further instructions regarding Form 1, Field 18 (FAIR Identifier) & Form 1, Part Index (Slide 33)). Made on Assembly (MOA) FAIs can be submitted on a single FAI.

- Upon review, AMT may respond to the FAIR in the following ways:
  - Approved: No further action from supplier required.
  - Disapproved: FAIR opens for supplier to make corrections and re-submit.
  - Conditional Approval: Supplier must perform additional work, typically via a Partial FAI.

- Disapproved FAIRs must be reviewed and updated by the supplier and resubmitted to AMT for review. Creating and submitting a new FAIR in lieu if correcting the issues on the original FAIR is not acceptable and will be rejected.

Navigating Net Inspect

- Suppliers will be required to utilize AMT's Net-Inspect system for all FAI submittals when required by the end customer. When compiling the FAI within Net-Inspect, 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 authorization by AMT Quality and must be noted on the AMT Purchase Order.

- If the original Full FAI is not accessible in Net-Inspect as it was performed prior to the implementation date of Net-Inspect (2010), AMT will require the supplier to complete Form 1 and attach the original Full FAI in the form of a PDF, including all necessary documentation.

Form One

Part Number Accountability

AMT Form One Requirements:

- Fields highlighted in Yellow are Required. Completion is mandatory.
- Fields highlighted in Blue are Conditionally Required. Complete these when information is available and applicable, or input N/A.
- Fields highlighted in White are Optional. These may be left blank.

Part Number Accountability

1. Part Number:	2. Part Name:	3. Serial #:	4. FAIR Identifier

5. Part Revision Level:	6. Drawing Number:	7. Drawing Revision:	8. Additional Changes: (COS, OPSP, SSP, ZSP etc.)
9. FAIR (Job) Number:	10. Organization Name:	11. Supplier Code:	12. P.O. Number:
13. Detail FAI: ☐ Assembly FAI: ☐	14a. Full FAI: ☐ Partial FAI: ☐	Baseline Part Number (including revision level)	
14b. Reason for Full/Partial FAI:			

a) If the above part is a detail part only, go to field 19.
b) If the 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 Type:	18. FAIR Identifier

19. Does FAIR Contain a Documented Nonconformance(s)? ☐ No ☐ Yes

20. FAIR Verified By: *(For electronic files type* Name + Stamp #)	21. Date:
22. FAIR Reviewed / Approved By: *(For electronic files type* Name + Stamp #)	23. Date:
24. Customer approval:	*25. Date:*

26. Comments:

AMT Form One Requirements:

- *R = Required*
- *CR = Conditionally Required*
- *O = Optional*

- The Baseline Part Number field is only required when the Partial box is checked in Field 14a. Input N/A if Full.
  - See FAI - Partial or Reaccomplishment of FAI (Slide 9)

Field	Requirement
Field 1 - Part Number (R)	Part number should match the Parts List (PL) or Bill of Materials (BOM). For modified part numbers with an (AMT) or (AMT1) suffix (or as otherwise stated or indicated), this field must match our Purchase Order/Contract, MPPL, or equivalent.
Field 2 – Part Name (R)	Part name should match the PLor BOM.
Field 3 – Serial Number (CR)	If part/assy is serialized, this field must be completed accordingly. If part is unserialized, field shall be N/A.
Field 4 – FAIR Identifier (R)	Reference number to identify FAIR.
Field 5 – Part Revision Level (CR)	Part rev must match the PL/BOM or the MPPL. No revision = N/C or No Change **This should be the part revision level, not the drawing revision level**
Field 6 – Drawing Number (CR)	List All Engineering containing design characteristics needed for product realization: -PL/PSDL (as applicable) -Dwg Sheet -CATIA Model (must list full MBD filename and extension (i.e. .CATPart, .CATProduct) -Material Parts List (RMPL) -Internally Generated Dataset Derivates
Field 7 – Drawing Revision (CR)	List engineering revision levels as listed on the applicable drawing sheet, MBD, PL, etc. List corresponding revs of ALL drawings. No revision (i.e. -) = N/C or No Change.
Field 8 – Additional Changes (CR)	This field contains the reference to any documents or instructions **(COS or equivalent)** on the AMT Purchase Order that authorizes a deviation from engineering applicable to the FAI part, including the associated revisions of the document. These are changes incorporated in the product by AMT or AMT's Customer but are not reflected in current engineering requirements.
Field 9 – Manufacturing Process Reference (Job) (R)	Routing, Job, Work Order number or equivalent.
Field 10 – Organization Name (R)	Organization accomplishing FAI.
Field 11 – Supplier Code (O)	Must match supplier code as specified on the PO/Contract.
Field 12 – PO Number (O)	PO number must match the AMT Purchase Order/Contract.
Field 13 – Detail/Assembly FAIR (R)	Is this FAI for a Detail Part or an Assembly? Check one. If Assembly, the Part Index (Fields 15-18) must be completed accordingly.
Field 14a – Full/Partial FAI (R)	Is this FAI for a Full or a Partial (Delta) FAI? Check one. The following field must be completed if this is a Partial/Delta FAI.
Baseline Part Number	This field is intended for linking/referencing the last FAI performed or the similar part FAI. Input the part number, part revision, and any other reference information to the last performed FAI. **If there is no baseline part number of prior part FAI to reference, N/A this field.**
Reason for Full/Partial FAI	See FAI - Partial or Reaccomplishment of FAI (Slide 9) for a list of reasons in which an FAI may need to be accomplished. Include additional relevant details in this field.

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AMT Form One Requirements:

- *R = Required*
- *CR = Conditionally Required*
- *O = Optional*

Fields 15-18 must be completed if the Assembly box is checked in Field 13.

- These fields can otherwise be omitted.

See further instructions for completing the Part Index in Net Inspect (Slide 33)

Field	Requirement
Field 15 – Part Number (CR)	List all hardware and detail/sub-assy parts as listed on the BOM and/or engineering. Materials listed on Form 2 do not need to be restated in the Part Index.
Field 16 – Part Name (CR)	Detail part names must match the Assy PL. Hardware/standards must match the PL or specification.
Field 17 – Part Type (CR)	Designate each part as one of the following: -Detail part -Sub-Assy -COTS -Standard Catalogue Item -Software
Field 18 – FAIR Identifier (CR)	FAIR number for detail/sub-assy parts or modified hardware requiring their own FAIR, or CofC reference for part number identified in Field 15.
Field 19 – Does FAIR Contain a Nonconformance? (R)	Check Yes or No. If FAI contains a nonconformance, note the MRR/NCR #. See requirements for Handling Nonconformances (Slide 10)
Field 20 – Verified By (R)	Individual who verified FAIR accuracy and completion against Evaluation of Completed FAIR (Slide 14)
Field 21 – Date (R)	Date Field 20 was signed.
Field 22 – Reviewed/Approved By (R)	Individual from the organization who reviewed and approved the FAIR.
Field 23 – Date (R)	Date Field 22 was signed.
Field 24 – Customer Approval (CR)	Records customer (AMT) approval.
Field 25 – Date (CR)	Date Field 24 was completed.
Field 26 – Comments (O)	Provide any supporting comments.

Net Inspect Unique Fields

Form One, Field One: Part Number

Purchase Part Complete (non-modified PN):

1. Part Number

114W4643-903

Customer Part Number

Purchase Part Complete (Modified PN):

1. Part Number

114W4643-903(AMT)

Customer Part Number

114W4643-903

Outside Vendor:

1. Part Number

114W4643-903-OV

Customer Part Number

114W4643-903

Description:

- Part number should match the Parts List (PL) or BOM. For modified part numbers with an (AMT) or (AMT1) suffix (or as otherwise stated or indicated), this field must match our Purchase Order/Contract, MPPL, or equivalent.
- Customer Part Number is required if the part number on the PO differs from the engineered part number.

Where to find base/customer part number:

- Purchase Order Documentation
- Engineering Documentation (Parts List)

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Net Inspect Unique Fields

Form One, Field Four: FAIR Identifier

4. FAI Report Number

1235

Internal FAIR Number | Customer FAIR Number

Description:

- This field contains the FAIR Number. This number is auto-generated by Net-Inspect and is unique to the FAIR, Supplier and Part Number.
- The Internal FAIR Number should be entered if it is applicable to the Supplier, else it should be left blank.
- The Customer FAIR Number is not used by AMT and should be left blank.

Form One, Field Ten: Organization Name

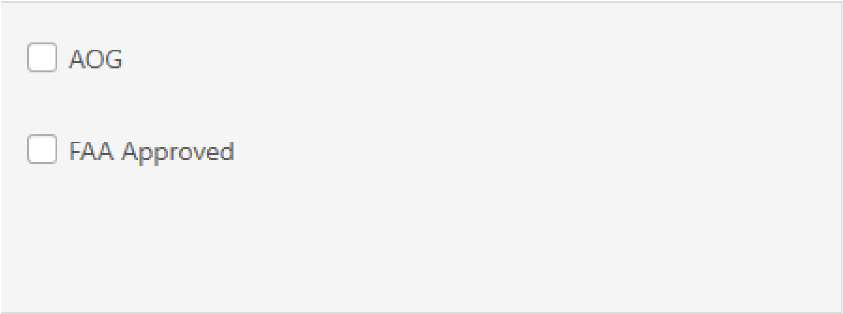
10. Organization Name

SENIOR AEROSPACE AMT - ARLINGTON

Description:

- This field contains the name of the Organization that is performing the FAI. This field will be automatically populated by Net-Inspect.

Net Inspect Unique Fields
Form One, AOG & FAA Approved Boxes

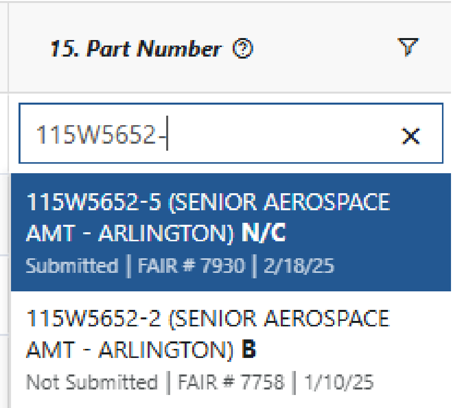


Description:

- This field is not required and is not used by AMT.

Net Inspect Unique Fields

Form One, Part Index



Description:

- Detail and Sub-Assy part FAIRs stored in Net Inspect will populate in a drop-down menu when inputting the part number in Field 15.
    - Selecting the appropriate FAI will populate fields 16, 17, 18, & Supplier with this part information.
- Boeing Hardware, COTS, or any items that **do not require an FAI** listed in the Part Index will require all fields to be completed manually.
    - The FAIR Identifier should provide traceability to the supplier certificate of conformance (e.g. CofC # noted in this field and certs supplied with FAIR)
    - Verify the use of customer approved sources.
    - Modified hardware requires a FAIR.

15. Part Number	16. Part Name	17. Part Type	Supplier	18. FAIR Identifier
115W5652-5	HINGE RIB ASSY	Sub-assembly	SENIOR AEROSPACE AMT - ARLINGTON	7930

Form Two

Product Accountability – Raw Material, Special Process(es), Functional Test

AMT Form Two Requirements:

- Fields 1-4 are flowed from Form 1.
- Fields highlighted in Yellow are Required. Completion is mandatory.
- Fields highlighted in Blue are Conditionally Required. Complete these when information is available and applicable, or input N/A.
- Fields highlighted in White are Optional. These may be left blank.

Product Accountability - Raw Material, Specifications, Special Process(es), Functional Testing					
1. Part Number: Input Data into Form 1		2. Part Name: Input Data into Form 1	3. Serial Number: Input Data into Form 1	4. FAIR (Job) Number: Input Data into Form 1	
5. Material or Process Name:	6. Specification Number:	8. Supplier: (Name, Address, and Code, as applicable)	9. Cust. Approval Verification: (Yes/No/NA)	10. Certificate of Conformance Number:	
11. Functional Test Procedure Number:	12. Acceptance report number:				
13. Comments:					

AMT Form Two Requirements:

- Material and Process requirements with measurable/verifiable results must also be listed on Form 3.

  This may include:
  1. Material specifications, including dimensions, specification requirements, and verification tests.
  2. Finish callouts (Penetrant inspection, anodize, primer, etc.)

- Modified standards must be listed on both Form 1 Part Index and Form 2.
  - Modified standards require their own FAIR.

Field	Requirement
Field 1 - Part Number (R)	Flowed from Form 1
Field 2 – Part Name (R)	Flowed from Form 1
Field 3 – Serial Number (CR)	Flowed from Form 1
Field 4 – FAIR Identifier (R)	Flowed from Form 1
Field 5 – Material or Process Name (CR)	Specify the material or process callout as specified in the engineering or specification.
Field 6 – Specification Number (CR)	Specify the spec number and classification (type, class, grade, etc). Spec & classification on certs from supplier who performed or supplied material should match this field.
Field 7 – Code (O)	Process Code as defined by D1-4426. Acceptable to omit from FAI.
Field 8 – Supplier (CR)	List either the organization performing the process OR supplying the material, including name, address, and approval (BE) code (when Boeing is end customer) or equivalent (for non-Boeing items). Raw Manufacturer: List the distributor or manufacturer. Ultrasonic Inspection: List the supplier who performed the inspection. Outside Processing: List the designated approved OP house. Materials (e.g., Alodine, sealant, anodize primer, paint): List the material manufacturer or distributor
Field 9 – Customer Approval Verification (CR)	Yes (if approved); No (if unapproved); or N/A (if approval is not required). When a distributor is used, enter the approval for the source, not the distributor.
Field 10 – Certificate of Conformance Number (CR)	List (at a minimum) the CofC number, lot number, or equivalent traceability number listed on the packing slip or cert provided by the supplier.
Field 11 – Functional Test Procedure Name (CR)	Enter the functional test procedure/acceptance test report number if applicable.
Field 12 – Acceptance Report Number (CR)	Enter the functional/acceptance test certificate of conformance number or equivalent.
Field 13 – Comments (O)	Provide any supporting comments.

- *R = Required*
- *CR = Conditionally Required*
- *O = Optional*

Net Inspect

Form Two, Reference Document

- Each segment of Form 2 (Materials, Processes, Inspections, Functional Tests) contains an additional Reference Document field in Net Inspect.
- This field can be used to directly link supplier CofCs, work orders, or other records to show objective evidence that Form 2 items conform to engineering requirements.
- You can alternatively/additionally attach all records, including those for Form 2 items, on the Documents tab in Net Inspect.

Materials

+ ADD MATERIAL

	5. Material Name	6. Specification Number	7. Code	8. Supplier	9. Customer Approval Verification	10. Certificate of Conformance Number	Reference Document
	PR 1776M B-2 SEALANT	BMS5-45 CLASS B-2		PRC-DESOTO (PPG) ASC-SEATTLE	N/A	21123052	P731936846 Cert Done SELECT FILES... File Name P731936846 Certs.pdf

Form Three

Characteristic Accountability, Verification and Compatibility Evaluation

AMT Form Three Requirements:

- Fields 1-4 are flowed from Form 1.
- Fields highlighted in Yellow are Required. Completion is mandatory.
- Fields highlighted in Blue are Conditionally Required. Complete these when information is available and applicable, or input N/A.

Characteristic Accountability Verification and Compatibility Evaluation							
1. Part Number: Input Data into Form 1			2. Part Name: Input Data into Form 1		3. Serial Number: Input Data into Form 1	4. FAIR (Job) Number: Input Data into Form 1	
Characteristic Accountability				Inspection/Test Results			
5. Char No.	6. Reference Location	7. Characteristic Designator (Key, etc.)	8. Requirement	9. Results	10. Designed/Qualified Tooling	11. Nonconformance Number	12. Additional Data / Comments
1							
2							
3							
4							
5							
6							

AMT Form Three Requirements:

- *R = Required*
- *CR = Conditionally Required*
- *O = Optional*

- If a view is indicated more than once on the drawing, capture this views characteristics however many times this view is indicated.

- Refer to Capturing Engineering (Slides 12/13) for input on what items (at a minimum) must be captured on the FAI and ballooned/bubbled documents.

Field	Requirement
Field 1 - Part Number (R)	Flowed from Form 1
Field 2 – Part Name (R)	Flowed from Form 1
Field 3 – Serial Number (CR)	Flowed from Form 1
Field 4 – FAIR Identifier (R)	Flowed from Form 1
Field 5 – Character Number (R)	Chars must be uniquely identified and accounted for on the balloon drawing.
Field 6 – Reference Location (CR)	Specify the location of the design characteristic explicitly (e.g. drawing zone, page number/section, DPD/MBD model location, specification callout) being verified. This field must be traceable to the document/title with the bubbled characteristics. Only approved engineering documents should be referenced in this field.
Field 7 – Characteristic Designator (CR)	Items are classified as one of the following, or N/A: Critical Items (AS9100D 3.2): These items have a significant effect on the provisions and use of the products/services, including safety, performance, form, fit, function, producibility, service life, etc.) Key Characteristics (AS9100D 3.3): An attribute or feature whose variation has a significant effect on product fit, form, function, performance, service life, or producibility, that requires specific actions for the purpose of controlling variation. Special Requirements (AS9100D 3.5): Defined by the customer as having requirements that have a high risk of not being met. Reference Characteristics: Reference characteristics can optionally be omitted from the FAI.
Field 8 – Requirement (R)	List the requirement as stated on engineering documents to the level of accuracy including tolerance of measurement (number of decimal places) & in the units specified on the drawing/model. Multiple Characteristics: If there are multiple characteristics/requirements in the same engineering callout, these should be listed as individual characteristics to ensure all results are captured. (ex: 90° angle X .160 radius should be listed individually on Form 3)
Field 9 – Results (R)	List inspection results to the level of accuracy including tolerance of measurement (number of decimal places) & in the units specified on the drawing/model. Multiple Characteristics (e.g. Drill x8 holes): List each characteristics individual values or list once with minimum and maximum measurement values. List nonconforming values separately from other results. Attribute Data (Pass/Fail): When there is no inspection technique resulting in Variable Data, when the engineering requirement does not specify numerical limits, or when qualified tooling is used as a go/no-go gauge, it is acceptable to specify Pass or Fail (or equivalent). Variable Data (Quantitative): Express quantitative data to the level of accuracy including tolerance of measurement (i.e., number of decimal places) when a design characteristic is defined by numerical limits. Visually Conforming Features: For characteristics verified by visual inspection/conformance verification (inspection of parts & documentation received from OSP), note Accept or Visual (or equivalent). Reference CofC/CofA or lab report. CMM Reports: It is acceptable to reference results from CMM/CMS report with either Pass or Fail so long as the CMM report is referenced in Field 10 and results are traceable to characteristics. Inspected Against PCM/Photographs/Master Samples: A statement of conformance is acceptable (e.g., Pass/Accept); Reference number on the forms. Processes: When there are processes requiring verification on Form 3, include a statement of conformance (e.g., Pass/Accept)
Field 10 – Designed/Qualified Tooling (CR)	Record tooling used to measure or verify requirement. Designed Tooling: If designed tooling (jigs/fixtures) or NC programming was used, record the tool ID number. Qualified Tooling (e.g., radius or pin gauges, go/no-go gauges): If qualified tooling is used, specify the gage range in this field. PCM: Specify PCM number if PCM was used to verify characteristic. CMM: Reference CMM report in this field if applicable.
Field 11 – Nonconformance Number (CR)	Specify nonconformance document number as applicable, or N/A if no NCR to reference.
Field 12 – Additional Data / Comments (O)	Provide any supporting comments.

Net Inspect
Form Three

- Net Inspect contains a number of options in terms of how the data is submitted into Net Inspect and how the data appears on Form 3.

- It is recommended to determine best practices for submitting to Net Inspect according to your current business needs and tools available for streamlining the FAI submission process.

Required Documentation

Any deviations from this controlled document will require prior written authorization by AMT's Director of Quality and must be noted on the AMT Purchase Order.

Required Documentation:

Bubble/Ballooned Drawings:

All engineering data with applicable features and characteristics must be uniquely identified and bubbled on engineering documentation. See requirements for Capturing Engineering (slides 12/13). This data is compiled and then attached/provided with the final FAIR.

These documents may include:

- AMT Purchase Order
- Parts list , PSDL, Raw Materials Parts List, MPPL, etc.
- Engineering Drawings (2D & 3D/DPD)
- Specifications
- Internally Generated Drawings

Additional Documentation Supplied with FAIRs:

- Material Certification of Conformance (CofC) from the original manufacturer (including standards, sealants, paints, metals, plastics, etc.)
    - Note: If using a distributor, full certification trail shall be included back to the original processor and/or manufacturer of material. CofC's must reference traceability number (e.g. raw material test report number, compliance report number, CofC) as assigned by the original manufacturer.
- Parts and/or materials procured directly from AMT shall be traceable through an AMT provided CofC
- Manufacturing, Test, and Special Process Certs
- CMM Report or equivalent inspection documentation
- Work Order/Job (or equivalent)
- Nonconformance Report (or equivalent)

Net Inspect
Documentation

- When submitting the FAIR to Net Inspect, all documentation must be attached to the FAIR on the Documents tab.
  - You can alternatively/additionally attach documentation for materials, special processes, and functional test items in the Reference Document field on Form 2.
- Most file formats are supported, including .pdf, .docx, .xlsx, .jpg, .bmp, .gif. Text, spreadsheet, image or model files are all supported.

Revision	Revision Description	Revision Date	Approval
-	New Document to replace “AMT Net-Inspect FAI Form Completion for Suppliers.pdf”	9/23/2020	Brian C.
A	Incorporated AS9102C and additional FAI requirements as determined/flowed down by AMTs customer base. Update Title and Logo.	1/1/2026	Laura L.

Prepared By: Quality Engineer	Laura Linton	**Date:**	1/1/2026
Verified By User Representative: Supplier Quality Engineer	Alta Oien	**Date:**	1/1/2026
QA Approval: Quality Engineer	Lee Bryant	**Date:**	1/1/2026
Approved By Document Owner: Director of Quality	Ria Acevedo	**Date:**	1/1/2026

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