# Perform Air International Inc. Fabrication Control Manual Section XIII

**Process: XIII.04 First Article Inspection** 

Revision	<b>Revision Date</b>	Revision Change
N/I	12/29/2023	Initial Release

## 1.0 Purpose:

First Article Inspection Report (FAIR) is to provide objective evidence that all Engineering design and specification requirements are properly understood, accounted for, verified, and documented.

## 2.0 Scope:

This document and Aerospace Standard AS9102 provides instructions and documentation requirements to complete a FAIR.

## 3.0 Responsibility:

Quality Management is responsible for the development, implementation, and control of this procedure.

### 4.0 Definitions:

**4.1 FAIR Package**: Group of documents (process and material certifications, in-process data, test data, etc.) which shows evaluation information and documentation for FAIR requirements.

#### 5.0 Process:

## **5.1** First Article Requirements:

- **5.1.1** All instructions and forms noted in AS9102 (as revised) shall be used in completing a FAIR. Exceptions or clarifications specific to Perform Air shall be noted in this document.
- **5.1.2** Unless otherwise specified, a new complete first article shall be completed on a three (3) year interval.
- **5.1.3** First Article requirements for fabricated articles shall be flowed down to the supplier. Quality Assurance shall verify that First Article requirements have been met. If a FAIR is required, Perform Air has the option to perform the First Article or return the parts to the supplier to complete the FAIR (if subcontracted).
- 5.2 Prior to accepting an article to warehouse, verify the completion of the FAIR.

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- **5.3** A FAIR part shall be randomly selected from a production or development lot. Parts identified as research do not require a formal FAIR.
- 5.4 Inspection personnel shall create a FAIR package containing a ballooned drawing and all required forms noted in AS9102.
- 5.5 First Article reports completed on in-process parts must account for all notes contained on the drawing including any reference to a <before and after> process condition (i.e. dimensions before plating and after plating).
- 5.6 In process inspection data may be used when verified and documented by an inspector. Characteristics that can only be verified in process which do not have documented data shall be inspected on the next available lot at the earliest operation. First Article data sheet shall be noted as Accepted In Process (AIP). Documentation must be attached to the FAIR. The FAIR package cannot be completed until all characteristics are verified.
- 5.7 Rejection of the First Article shall be in accordance with Non-Conforming Material Procedures. The first line of the defect description of the Material Discrepancy Report shall note: "First Article Rejection."
- 5.8 When a First Article has uncovered a discrepancy, the rejection shall be documented in the comments section and the rejection document number noted. An update will be performed on the lot after the Corrective Action has been taken to rectify the discrepancy. An update will be performed only for the characteristic(s) that were rejected.
- **5.9** The FAIR package shall contain all certifications and documents that are used for the evaluation of the First Article.
- **5.10** The FAIR package shall be scanned into document control computer system and hard copy filed into established filing containers.
- **5.11** Input FAIR information in the on-line inspection database computer program used for tracking FAIR completion and revisions.
- **5.12** FAIR documentation using AS9102 forms with information specific to Perform Air International Inc.
  - **5.12.1** First Articles completed for the three (3) year update requirement shall be noted "3 Year Update" on Form 1. Also note the DATE the update is completed.
  - **5.12.2** Drawing changes that have no effect on a current FAIR shall be noted as "Revision, No Effect" on Form 1 and attached to the original FAIR.

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- **5.12.3** Changes in the revision level for a current FAIR shall require a FAIR update. Updates shall show all drawing elements affected by the revision. The revision shall be identified as a "**Revision Update**" on Form 1 and attached to the original FAIR.
- **5.12.4** If a revision has no effect on the First Article, note "**No Effect Update**" on Form 1 and attach to the original FAIR.
- **5.12.5** Notes or drawing features that only provide information shall be noted as "Accept" or actual dimension in the Results column and "Design Information" in Measuring Equipment column.
- 5.12.6 The FAIR shall include a review of all test requirements. The inspector shall compare the test data sheet to drawing and/or Test Procedure requirements. If test requirements cannot be distinguished from design requirements, the inspector will submit the drawing to the applicable Engineer for evaluation. If the requirements are still unclear, the Engineer will request an interpretation from Engineering Management or the customer. If Engineering or customer interpretations are required, a letter of the specific interpretation shall be included in the FAIR package. This may include additional hardness testing as required on certain products that have a hardness requirement as the result of a heat treat process. FAIR package must have certifications from the Heat Treat processor and additional test certificate from an independent test and customer supplemental purchase order conditions for additional FAIR needs and/or requirements.

### 6.0 Records

**6.1** AS9102 FAIR Form 3: Form 67.10