

Title First Article Inspection Requirements		Book Identification SQRM	Number Control SQR 9.0
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1.0 First Article Inspection

- 1.1 As stated herein, by Purchase Order, Vendor Instruction or other contractual requirements, a First Article Inspection Report, (FAIR), must be performed in accordance with AS9102.
- 1.1.1 All engineering drawing characteristics including tolerances and applicable drawing notes must be documented on the First Article Inspection Report. The supplier may use the forms as supplied in AS9102, Kaman form Q.F. 4.1.302, (latest revision available on request), or, substitute their own FAI record, provided it meets all the requirements specified in AS9102.
- 1.1.2 Subcontracted characteristics that are deemed special processes shall also include information on the FAIR and shall be traceable to the subcontractor's certification.
- 1.1.3 An FAIR shall be provided for product categories listed below, at the frequencies identified in Para. 1.6 for the following:
- a) Assemblies
 - b) Sub-assemblies
 - c) Detail parts, including castings and forgings
- 1.2 This Standard does not apply to procured Standard Catalog Hardware or Deliverable Software.
- 1.3 The part/assembly utilized for the FAI shall be selected from the first lot of parts/assemblies, and shall be representative of the production run. Supplier shall not use prototype parts, or parts manufactured using methods different from those intended for the normal production process, for the FAI.
- 1.3.1 Inspection must include, as a minimum, visual, dimensional, hardness, conductivity, surface finish, and engineering drawing accountability and interchangeability checks, functional testing, as applicable.
- 1.4 Special tools (jigs, templates, fixtures, etc.) that the supplier fabricated to be used as a media of inspection shall not be utilized for the FAI unless authorized by KAC Quality Planning. The correspondence, which granted the approval, must be referenced on the FAI report.
- 1.4.1 Each engineering drawing variable data characteristic must be checked by direct measurements with measuring devices having current calibration.
- 1.4.2 Each FAIR shall include:
- a) All design characteristics which are uniquely traceable to the drawing,
 - b) All changes, initiated by E.O., E.C.R., quality plans, work instructions or design media,
 - c) Direct traceability to tooling, gauging, quality plans, test reports,

- d) Evidence of raw material certification, customer supplied product, special processes,
- e) Unique identifiers for each attribute,
- f) Source characteristic/attribute origin, e.g. drawing, drawing note, electronic media (MBD),
- g) CMM program and report that indicates points inspected to the model (cloud cluster or map) that includes tolerances of points as measured from the model.

1.5 The FAI report shall be submitted to KAC at the frequencies indicated on the Vendor Instruction. When frequencies are not specified, the following requirements apply:

- a. With the initial shipment,
- b. As directed in AS9102 paragraph 5.3

1.6 The FAIR for parts with reported discrepancies not re-workable to drawing requirements shall include the KAC approved Vendor Request for Variation (VRV) number.

1.6.1 The subsequent lot of parts is to be subjected to a FAI for the characteristics identified discrepant on the first lot, or until an acceptable FAI is completed.

1.6.2 When product has been selected for FAI, the product must be clearly identified using tags or similar method. Deliverable FAI product shall be identified.

2.0 **Records**

The recording of the variable data on the first article inspection report must be clear and well defined. Results from inspection of design characteristics shall be expressed in quantitative terms (Variables Data) when a Design Characteristic is expressed by numerical limits. These records are objective evidence of the inspections performed. They may be utilized for presentation to our customers and/or used as traceability requirements dictate.

2.1 All completed FAIR shall be retained by supplier for a period of ten, (10) years, at which time Kaman shall be given the option for transfer of ownership.

3.0 APPROVALS;

Kaman Aerospace Corporation. Bloomfield CT.

Peter Wakefield Quality Manager Approved via email 4/7/08

Kaman Aerostructures. Jacksonville FL

Jean Brelsford Quality Manager Approved via email 4/7/08

