PARTS AIRWORTHINESS INSPECTION
JOB FUNCTION 13

1. OBJECTIVE

This chapter describes the check items used by the Inspector to perform the airworthiness inspection before parts shipment.

2. GENERAL

The timings to perform the parts airworthiness inspection are as follows:

A. All parts shipped from the Production Approval Holder (PAH)'s facilities must be furnished with an Authorized Release Certificate (ARC, CAA Form 1) for airworthiness approval. The inspector shall perform the part airworthiness inspection before signing the Authorized Release Certificate.

B. When the CAA is delegated by the foreign authority to sign the certificate of conformity for parts shipment, the inspector must perform the parts airworthiness inspection as well.

C. The PAH and the manufacturing facilities which the foreign authority requests the CAA to monitor are hereafter all referred to as the "evaluated facility".

3. CHECK ITEMS OF PARTS AIRWORTHINESS INSPECTION

A. **Statement of Conformity.** Before the parts are presented to the CAA for airworthiness inspection, the evaluated facility shall accomplish all the inspections. After the evaluated facility ensures that the parts are conformed to the approved design data and in a condition for safe operation. Then a Statement of Conformity shall be presented to the inspector before the parts airworthiness inspection is performed.

B. **Manufacturing/Assembly Operation Sheet.**

(1) Does the revision of the drawing and the engineering order reflect the most current configuration?

(2) Is the most current configuration incorporated in the revision of the manufacturing/assembly operation sheet?

(3) Does the workers follow the steps listed in the manufacturing/assembly operation sheet and the operator or company inspector stamp each work/inspection step?

(4) Are the important process parameters (such as the heating curve of the heat treatment, time control for chemical milling process, out-time/batch control of the adhesive) conformed to process specification?

C. **Appearance.**

(1) Is the part free from paint exfoliation, scratch or corrosion?
(2) Is the assembly requirement accomplished and followed, such as the rivet flushness or countersink hole?
(3) Is any interference found between assembled parts?
(4) To ensure that there is no foreign object damage in the assembly.

D. **Required Inspection and Test Records.**
(1) To inspect the material property test report, process acceptance test record and certificate of conformance of the raw material.
(2) To check required test items, test acceptance criteria, test report, the calibration of the test equipment and its traceability to national standards.
(3) To check the inspection sheet revision, inspection items, inspection acceptance criteria (such as the drawing dimension tolerance) and company inspector's stamp.
(4) Tooling periodical calibration records.

E. **Approved Deviation and Concession.**
(1) Are all the nonconformities in the process corrected?
(2) Is the disposition method (Use-As-Is/Rework/Repair/Scrap) of the nonconformities appropriate?
(3) What level of disposition authority is granted? Do the authorized personnel confirm all the dispositions?
(4) To check the nonconformity disposition procedure (such as the repair procedure for composite parts, i.e. cleaning, sanding, adhesive filling, curing and reinspection).
(5) Are all dispositions of the nonconformities reinspected and accepted?

F. **Marking.**
(1) Is the marking of the part number correct?
(2) Are the revision marking of the drawing and engineering order correct, if applicable?
(3) Is the serial number identification correct, if applicable?
(4) Does the company inspector stamp on the identification plate, if applicable?
(5) Date of manufacturing.
(6) To check other marking requirement, such as the "CAA-PMA" identification or specific TSO marking requirement.
(7) The identification position and method.

G. **Release Document.**
(1) To check actual amount and items of shipment according to the contract information.
(2) Are the serial numbers listed in the release document correct?

(3) Is the listed revision of the drawing and engineering order correct?

(4) To ensure all the inspections are accomplished and confirmed by the company inspector?

(5) Are the items not to be completed clearly defined?

H. **Others.**

The inspector can perform the necessary inspection other than the check items listed above and audit the related quality system functions.

4. CORRECTIVE ACTIONS

A. Whenever the nonconformity is found, the evaluated facility shall be requested to correct the issue immediately. The inspector will record the nonconformity and the result of corrective actions on the "Conformity Inspection Record (CAA Form 8100-01)".

B. If the nonconformity cannot be dealt with immediately by the evaluated facility or the result of corrective actions is not deemed satisfactory, the inspector shall not sign the Authorized Release Certificate unless all the nonconformities are closed. The inspector can review the subsequent corrective actions by checking the documents submitted by the evaluated facility or performing the on-site inspection again. When all the nonconformities are finally found to be acceptable, the inspector will then sign the Authorized Release Certificate and change the unsatisfactory mark to satisfactory one on the "Conformity Inspection Record".

C. If the nonconformity points to the potential system deficiency after further evaluation. The inspector will fill out the "Noncompliance Record (CAA Form 8100-06)" and request the corrective actions. The evaluated facility will then furnish all the evidence to the inspector. The inspector will check the document or conduct the re-audit on site. The "Noncompliance Record" will be closed after all the dispositions of nonconformity are deemed satisfactory. The issue will then transfer to the Principal Inspector for the follow-up actions.

D. The inspection results or nonconformities may be alternatively recorded in relevant forms of Flight Safety Management Information System (FSMIS). The corrective actions may also be submitted and reviewed through FSMIS.

5. PREREQUISITES AND COORDINATION REQUIREMENTS

A. Prerequisites.

(1) Knowledge of the regulatory requirements of CAA.

(2) Successful completion of the Aviation Safety Inspectors courses or equivalent.

(3) Familiarity with FAA Order 8130.21G and its latest revision.

(4) Familiarity with FAA Order 8130.2G and its latest revision.

B. Coordination. This task will be performed according to the shipment schedule and coordination between the assigned inspector and the evaluated facility.

6. REFERENCES, FORMS, AND JOB AIDS

A. References

(1) Airworthiness Approval Issuance Procedure.

(2) Job Function：QASEP Evaluation.

B. Forms

(1) Authorized Release Certificate, CAA Form 1

(2) Conformity Inspection Record (CAA Form 8100-01)

(3) Noncompliance Record (CAA Form 8100-06)