

PRODUCT AUDIT

JOB FUNCTION 10

1. Purpose

Product audit is a re-inspection to verified that :

- A. The conformity of product, materials, parts and manufacturing process to the CAA-approved design. °
- B. The airworthiness of products utilizing critical and certain non-critical characteristics and/or processing attributes generated during the manufacturing process.
- C. The effectiveness of the PAH's or associate facility's quality control or inspection system °

2. General definition

- A. The product audit may be initiated at any point in the manufacturing process from detail parts to final products.
- B. Inspector shall conduct product audit by need to ensure the effectiveness of the PAH's facility's quality control or inspection system.
- C. Utilizing critical characteristics and/or processing attributes generated during the manufacturing process to evaluates the effectiveness of the PAH's facility's quality control or inspection system and the airworthiness of products.

3. Selection of product audit characteristics :

A. Select products, materials, or parts that :

- (1) Have an impact on safety.
- (2) Have critical characteristics.

Critical characteristics are those where failure to maintain conformity could cause loss of function and create an unsafe condition.

- (3) Have critical manufacturing processes.

Critical process attributes are those where lack of conformity directly affects the product or part(s) thereof and could cause failure

or create an unsafe condition.

B. Product audit area, products, materials, or parts selected may be :

- (1) A final product found in stores area.
- (2) A subassembly received by the PAH or associate facility or that has been produced by the PAH or associate facility for shipment to another facility.
- (3) A detail part purchased or produced by the PAH or associated facility.
- (4) Raw material received by the PAH or associated facility.

D. Product audit criteria :

- (1) Operational/functional.
Verify that sub-assembly or final product conforms to the functional/operational test criteria; e.g., revalidating test results, test setup, rig approval, certified equipment, use of approved procedures, certified test parameters, use of required rig, calibration.
- (2) Dimensional
Compare actual recorded measurement(s) of the selected characteristic with the approved design data. Verify characteristics are inspected using the correct calibrated tooling, gauging, fixtures, etc., surface finish dimensions and radius meet drawing tolerances, inspections are performed in proper sequence (following work instructions); e.g., review or revalidate inspection records.
- (3) Visual.
Inspect part for obvious external defects; e.g., corrosion, burrs, handling damage, scratches.
- (4) Identification
Compare actual identification plates, tags, markings etc. with approved design data or purchase order requirements and verify that identification is maintained throughout the product line; e.g., part numbers, serial numbers, lot numbers for raw material, inspection stamps. For software revision verification, verify software part number can be displayed on screen or software load verified by documentation review.
- (5) Documentation

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Verify the latest revision level or changes, proper work instructions, completed operations, proper authorizations; proper use of statistical sampling; e.g., certificate of conformance, work travelers, blueprints, specifications, first article inspection records.

(6) Special Processes

Verify special processes are in accordance with approved process specifications. Verify operator qualification/certification; e.g., test coupons, training requirements for operators, test set-ups, documentation.

(7) Material

Verify that the PAH has verified that incoming raw material meets its specification requirements.

APPLICABILITY OF PRODUCT AUDIT CRITERIA TO PRODUCT AUDIT AREAS (MINIMUM).

	PRODUCT AUDIT AREAS			
PRODUCT AUDIT CRITERIA	FINAL PRODUCT	SUBASSEMBLY	DETAIL PARTS	RAW MATERIALS
Operational/ functional	X	X		
Dimensional	X	X	X	X
Visual	X	X	X	X
Visual	X	X	X	X
Identification	X	X	X	X
Documentation	X	X	X	X
Special processes		X	X	X
Material		X	X	

4. The product audit may be initiated at any point in the manufacturing process after inspections have been completed, or may be conducted in conjunction with :

- A. Annual audit.
- B. PI audit.
- C. Supplier control audit

5. Recording product audit results

All product audit activity will be recorded on CIR (CAA Form 8100-1).
When unsatisfactory conditions are identified, prepare Form(s) 8100-6, and attach applicable objective evidence.

6. Reference Materials

FAA Order 8120.2D Production Approval and Certificate Management-
Paragraph 148~153.