

VOLUME 3 GENERAL TECHNICAL ADMINISTRATION**CHAPTER 36 REVIEW 14 CFR PART 121/135.411(A)(2) ENGINEERING CHANGE AUTHORIZATION****Section 1 Evaluating an Engineering Change Authorization/Order****3-3681 PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.**

A. Maintenance: 3346.

B. Avionics: 5346.

3-3682 OBJECTIVE. This chapter provides guidance for evaluating an Engineering Change Authorization/Order (EA/EO).

3-3683 GENERAL.

A. EA/EO-Provided Formats for Air Carriers. An EA/EO provides an air carrier with a format for:

- 1) Documenting major repairs and alterations to equipment the operator uses;
- 2) Recording Federal Aviation Administration (FAA)-approved data and procedures for accomplishing alterations and repairs to aircraft, propellers, powerplants, accessories, and components. If no previously approved data exists, the operator must obtain approval through an FAA engineering office or a Designated Engineering Representative (DER); and
- 3) Developing procedures and data used to comply with and provide verification of Airworthiness Directives (AD).

B. Reviewing an EA/EO. In reviewing an EA/EO, the inspector should be aware that the EA/EO serves not only as a maintenance record, but also as a planning document for the operator. The EA/EO will normally contain material and personnel requirements, diagrams (blueprints, schematics, etc.), detailed procedures, and signoffs. The inspector should ensure all data is correct, complete, and does not conflict with existing EA/EO or maintenance procedures.

C. EA/EO Provisions for New/Modified Equipment. If the EA/EO concerns new or modified equipment, maintenance procedures may have to be revised or developed. Coordination with the Principal Operations Inspector (POI) may be required to ensure the Operations Manual and/or Approved Flight Manual (AFM) contain the revised or new procedures.

3-3684 PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites. Knowledge of the equipment involved in the EA/EO.

B. Coordination. This task requires coordination between the Principal Avionics Inspector (PAI), Principal Maintenance Inspector (PMI), POI, FAA Engineering, Flight Standards (FS) office management team, the manufacturer, and the operator.

3-3685 REFERENCES, FORMS, AND JOB AIDS.

A. References (current editions):

- FAA-approved data (Maintenance/manufacturer's manuals, Supplemental Type Certificates (STC), AD, etc.).
- Title 14 of the Code of Federal Regulations (14 CFR) Part 43.
- Advisory Circular (AC) 120-77, Maintenance and Alteration Data.

B. Forms. None.

C. Job Aids. None.

3-3686 PROCEDURES.

A. Review the Operator's Submitted EA/EO. Ensure the following:

- 1) Operator's classification (minor/major) is correct.
- 2) If classified as major, that data has previous FAA approval (if not, see Volume 4, Chapter 9).
- 3) Diagrams and procedures are clear, precise, and complete.
- 4) Proper materials are listed and employed.
- 5) Individual maintenance and inspection task signoffs are provided for and are adequate to ensure EA/EO compliance.
- 6) The EA/EO does not affect existing systems and/or procedures.
- 7) Maintenance/operating manuals and procedures are revised to include new or revised procedures that may be required as a result of the EA/EO.

B. Analyze Findings. If discrepancies are noted, contact the operator and request corrective action.

3-3687 TASK OUTCOMES.

A. Complete the PTRS Record.

B. Complete the Task. Successful completion of this task will result in the following:

- 1) For a minor EA/EO, discard the office copy of the EA/EO.

2) For a major EA/EO with previously approved or field-approved data, file the EA/EO in the responsible Flight Standards office's operator file.

3) For a major EA/EO without previously approved or field-approved data, return the EA/EO to the operator to obtain the necessary approvals through DERs, etc.

C. Document the Task. File all supporting paperwork in the operator's office file.

3-3688 FUTURE ACTIVITIES. Normal surveillance.

RESERVED. Paragraphs 3-3689 through 3-3705.