

Flammability by Traceability/ Comparative Analysis

FAA Policy PS-AIR-2X-1701

Presented to: ACO Outreach

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Federal Aviation
Administration



Scope

- **Reduction of certification costs through the use of trace compliance based on previous FAA approvals**
- **Applies to certain requirements within §§ 23.853, 23.855, 23.1359, 25.853, 25.855, 25.1713, 27.853, 27.855, 27.1365, 29.853, 29.855, and 29.1359**
- **Tests in accordance with:**
 - Part 23, Appendix F, Part I
 - Part 25, Appendix F, Parts I, II, IV, and V

Scope

- **Applicable to STC applicants only**
- **Addresses**
 - § 21.20, Compliance with applicable requirements
 - § 21.21, Issue of type certificate
 - § 21.31, Type design
 - § 21.117, Issue of supplemental type certificates

FAA Order 8110.4C

- **Section 2-6(k) Data Submitted for Approval**

- (2) FAA personnel may use the applicant's or certificate holder's data for reference or evaluation of any subsequent applicant's submitted data if the information is used solely for that purpose.
- (3) Provides procedural guidance on the use of a previous applicant's data as a means of compliance for a subsequent applicant (assumes applicant has the data)
 - Must show evidence it was approved by the FAA
 - Must show previous approved data is applicable
 - Provides sufficient substantiation and descriptive data of its own modification
 - Has sufficient engineering data for COS support or multiple STC Situation

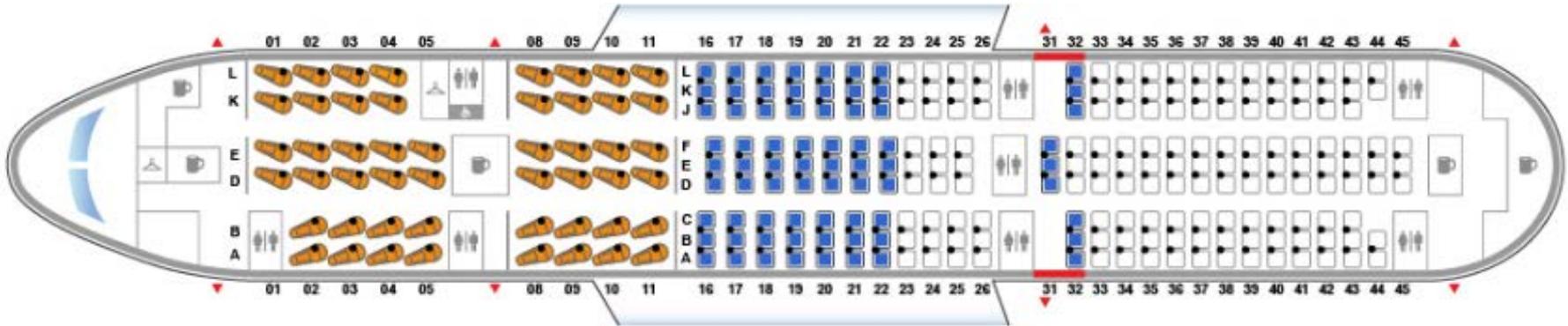
What Is Compliance By Comparative Analysis?

- A means for an applicant to satisfy the § 21.21(b) requirement to submit type design, test reports and computations by showing traceability to previously FAA approved data
- An applicant initiated action
 - Applicant provides sufficient data/analysis to establish traceability
 - Show that the approved design holder's parts complied with the appropriate flammability requirements for the product on which they were installed
 - Applicable aspects of the material, design, use, orientation, and certification basis align between the holder's and applicant's articles

How Does It Work

- Applicant submits for STC or ASTC design approval
- Applicant & FAA develop compliance checklist
- Applicant provides line item evidence of previously submitted and FAA approved (TC holder) flammability compliance data
 - List of items showing applicability (found in PS)
 - Included as part of the showing of compliance documentation
- Applicant submits other required compliance data
- FAA finds compliance based on submitted data and analysis

Example



Importance of Evidence

- Compliance by trace is not a waiver of any airworthiness requirement
- Applicant must provide evidence of FAA approval to support request for compliance by trace
- Evidence must be specific enough to minimize or eliminate the need for FAA to access previous compliance data for verification of finding
- Policy details list of required items

Evidence for Analysis

- **Design holder drawings with rationale that shows applicant's articles are traceable to a previous FAA-approved TC or ATC design**
- **Model/series comparison**
- **Part number**
- **Comparison of Certification basis including special conditions, exemptions, equivalent level of safety findings**
- **Location within aircraft**
- **Determination the original article flammability compliance was not based on a "small part" determination**
- **Determination the material is identical to the approved material**
- **Determination the testing requirements are the same for the applicant's article and the previously approved article**
- **Evidence that no feature or characteristic would make the product unsafe**
- **Determination the original article is not subject to an airworthiness directive (AD) and is free of airworthiness issues**



§ 21.20 Compliance Statement

If an applicant shows sufficient evidence of traceability to previously FAA approved data, the responsibility for submission of the necessary data has been satisfied, and “*Traceability to previously FAA approved data*” would be the documented line item means of compliance as required by § 21.20(a)

Contact Information

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