

Use of Previously Approved Data

Presented to: ACO Outreach

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Federal Aviation
Administration



Reusing Technical Data

Common Questions



How do you know the data that was generated is still valid?



At what point in the project is the data approved?



What evidence does the applicant need to reuse the data?



Are there special considerations for data approved via a foreign authority?

Technical Data

Descriptive Data

- Drawings and specifications necessary to define the configuration and the design features;
- Information on dimensions, materials, and processes;
- Airworthiness limitations, if applicable; and
- Documents such as instructions for continued airworthiness (ICA) and airplane or rotorcraft flight manuals, if applicable

Reference §§ 21.29 and 21.31

Substantiation Data

- Test results
- Computations, and
- Other information necessary to show that the descriptive data meets the applicable requirements





Approved

Unless used with reference to another person, means approved by the FAA or any person to whom the FAA has delegated its authority in the matter concerns, or approved under the provisions of a bilateral agreement between the US and a foreign country or jurisdiction

Reference 14 CFR § 1.1

How is Data Approved?

- **Technical data are approved under part 21 usually when the FAA issues a design approval**
 - Type Certificate (TC)
 - Supplemental Type Certificate (STC)
 - Parts Manufacturer Approvals (PMA)
 - Technical Standard Orders (TSO)
 - Other methods, i.e. § 21.8(d)
- **Technical data can also be approved in support of repairs and alterations such as field approval (block 3 of FAA Form 337) and by using FAA forms 8110-3 or 8100-9**
- **Data associated with Part 39 Airworthiness Directives (e.g., service bulletin or AMOC)**

Evidence of Approval

- **FAA or FCAA Documentation**
 - Letter
 - Stamp
 - Traceability to Design Approval
- **Designee Approval (DER or ODA)**
 - FAA Forms 8110-3 or 8100-9

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
STATEMENT OF COMPLIANCE WITH AIRWORTHINESS STANDARDS

1. DATE

2. NAME 3. ADDR. NO. 4. TYPE (Aircraft, Engine, Propeller, etc.) 5. NAME OF APPLICANT

6. INSTITUTION 7. TITLE

8. PURPOSE OF DATA

9. APPLICABLE REQUIREMENTS (List applicable requirements.)

10. CERTIFICATION: I, the undersigned, being duly qualified by the Administrator, do hereby certify that the conditions and limitations of approval stated in this form are in accordance with the applicable requirements of the Federal Aviation Regulations and the applicable requirements of the Administrator's technical orders.

11. Signature of Designee Designee Approval of these data Approve these data

12. SIGNATURE OF OPERATOR OR DESIGN APPROVED PERSONNEL 13. SIGNATURE OF INSPECTOR 14. SIGNATURE OF OTHER

FAA Form 8110-3 (2017) SUPPLEMENT 1 (REV. 12/14)

References

FAA Order 8110.4, 2-6(a)(2)

- Applicant wants to reuse part from TC design in new design
- Data generated for the first TC is still valid FAA data
- Use of the part in a new application requires a new showing of compliance
- Previously generated data may or may not be adequate (or applicable) to make the new showing of compliance
- Showing includes activities – like writing compliance reports – in which the applicant presents the various data in a logical order with explanations of how the data prove compliance

References

FAA Order 8110.51, “Acceptability of Previously Approved Certification Compliance Data from Foreign Sources”, Section 4

- **Current regulations and policy do not specify acceptable sources of compliance data or the method of acquiring the data, whether generated by a foreign or domestic applicant**
- **Basic principles for accepting data are the same as for U.S. applicant-generated data.**
- **Using and accepting any data to demonstrate compliance must be based on the FAA’s ability to establish the applicability and validity of the data**

Determining if data is valid

The FAA verifies data is valid by confirming the steps of the original data acceptance. Typically:

- Approval of the applicant's test plan,
- Confirming the conformity of a test article and test setup,
- Verifying the qualifications of personnel involved in the setup,
- Witnessing and approving the test data, and
- Ensuring approved test procedures were used

Determining if data is applicable

- **Is the data appropriate for an FAA certification project?**
- **We evaluate if the design data approved for a certain use can be appropriately applied to another use**
- **The applicant's showing of identicality, providing rationale for non-interference with any design features of the new model, etc.**

Applicant Responsibilities

Applicant is still responsible for submitting a sufficient data package to the ACO (as required by § 21.21(b)) that is necessary to show that the product meets the applicable requirements of the Federal Aviation Regulations

Contact Information

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