

NOTICE

US.Department of Transportation
Federal Aviation Administration

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11/19/91

Cancellation
Date 11/19/92

SUBJ: Use of Previously-Approved Data in **Complying** with the Applicable Requirements of Federal Aviation Regulations (FAR) § 21.115(a)

1. **PURPOSE.** This notice prescribes procedures for the use of previously-approved substantiating data when showing compliance with the applicable airworthiness requirements described in FAR § 21.115(a). These procedures are applicable when two supplemental type certificate (STC) projects with two different applicants are sufficiently similar so that their differences in configuration and design features would not cause a difference in the required substantiating data. These procedures are also applicable to an STC project that is sufficiently similar to an amended type certificate project.
2. **DISTRIBUTION.** This notice is distributed to the Washington headquarters branch or division level of the Aircraft Certification Service; to the division level in the Aircraft Certification Directorates; to all Aircraft Certification Offices; and the Brussels Aircraft Certification Division.
3. **BACKGROUND.** Part 21 of the Federal Aviation Regulations (FAR) contains neither provisions for nor restrictions against the issuance of STC's based upon similarity. Section 21.115(a) states "Each applicant for a supplemental type certificate must show that the altered product meets applicable airworthiness requirements..." It should be emphasized that the applicant is responsible for the level of safety and level of certitude of the whole product as altered, when considering the effects of the alteration, and not just for the physical change itself. Occasionally, over the years, the above requirements have been met based on Federal Aviation Administration (FAA) knowledge of previously approved alterations to type certificated products when making a finding of compliance with the applicable airworthiness requirements. Substantiating data was not required in those instances where recertification was found unnecessary based on the certainty that additional substantiating data would not further the assurance of the safety of the altered product. However, a procedure was never available that addressed the use of knowledge obtained from previous type certification programs.
4. **DISCUSSION.** There is a need to establish an acceptable procedure that addresses both the use of previously approved substantiating data and the use of FAA knowledge obtained from previous type certification projects.
 - a. Reference to the FAA, as used herein, means the person or office (e.g., project manager, Aircraft Certification Office) responsible for the unique project or part of the project for which this procedure is being applied. This person or office should be able to draw upon anyone else within the agency for assistance.

b. In complying with the ~~requirements~~ of FAR § 21.115 (a), the applicant is required to show that the altered product meets the applicable *airworthiness* requirements. Generally, the applicant is only required to substantiate the change and the components or areas affected by the change. These components and areas are those where the original substantiation is no longer applicable and, therefore, there is a need for recertification. The basis for establishing the extensiveness of the recertification lies in the knowledge of the FAA.

c. It is reasonable to extend this concept to the change itself. That is, if the change or components of the change are sufficiently similar to ones previously approved, additional substantiating data would not further the assurance of the safety of the altered product. Therefore, minimizing or waiving the need for submitting substantiating data for components or areas of an altered product that are subject to recertification must be based on the certainty that additional substantiating data will not further the assurance of the safety of the altered product. This finding is, perhaps to a large extent, based on the FAA's experience with a previous applicant's similar project.

d. This notice will address the following subjects:

- Completeness of project files:
- Applicant's use of previously approved substantiating data; and
- FAA's use of its knowledge which includes that obtained during previous type certification projects.

5. PROJECT FILES. Any project file for an alteration should be complete, that is, the change to the type design should comply with the data requirements for type designs in accordance with FAR § 21.31. These type design data must include data for continued airworthiness and substantiating data which provide the showing of compliance with the applicable regulations.

a. Under FAR § 21.21(b), the applicant must submit the type design, test reports, and computations necessary to show that the product to be certificated meets the applicable airworthiness requirements. This notice does not intend to alleviate that ~~requirement~~. The only function of this notice is to reduce the effort required by the FAA to make a finding that the applicant has met the airworthiness requirements.

b. If the FAA minimizes or waives the need for the applicant to provide substantiating data for specific requirements in accordance with paragraph 8b, based on FAA knowledge, then these data would not be in the file. However, a brief rationale explaining these findings should be made by the FAA and put into the file.

c. There should be sufficient **substantiating data** to permit a **finding** of **compliance** with the **applicable requirements** during a subsequent **review**. A **previous applicant's substantiating data, provided by the current applicant,** may be **in the project file** as part of the **substantiating data to satisfy this requirement** providing it **applies** to the **current project**.

d. This notice only addresses the **substantiating data which are required** to show **compliance** with the **applicable regulations**. It is not concerned with **data required for other needs, such as continued airworthiness or maintenance, even though the same data may be involved.**

6. **DISCLOSURE OF PREVIOUS APPLICANT'S DATA.** The following **restrictions** pertain to the disclosure by the FAA of a **previous applicant's substantiating data:**

a. The policy for disclosure of FAA **information** is contained in FAA Order 1200.23, **Public Availability of Information**. This order provides for **descriptive** and substantive data received **from** applicants to be considered **proprietary** and, therefore, **not releasable** by the FAA.

b. FAA **copying** of **substantiating data from a previous project file and putting it into the current project file** is, in effect, releasing **proprietary data** since the **current project file is accessible** to the current applicant and, therefore, is **not acceptable**. This also includes **FAA memorandums, letters, notes, etc., that contain data or details of the previous project.**

c. **Limitations, procedures, and performance data contained in airplane or rotorcraft flight manuals are public information (non-proprietary) and may be released to the current applicant upon request.**

7. **KNOWLEDGE OF PREVIOUS APPLICANT'S DATA.** Knowledge that is of interest here is that **knowledge** acquired by the FAA during **certification** of the previous **applicant's project**. Review of any certificate holder's **data files** by the FAA is permissible and **not considered** as infringing on the **proprietary rights** of the owner as long as the information is used solely to **benefit the FAA**. These data must not be disclosed to third parties who have not obtained written permission **from the previous applicant.**

The following **comments** pertain to **knowledge** acquired during certification of the **previous applicant's project:**

a. **Unacceptable** use of **knowledge** is **providing** the current **applicant** information of the **previous applicant's substantiating data** or design.

b. Acceptable use of **knowledge** is when it is used for the **FAA's own** benefit and does **not result in indirect** application of a prior **applicant's** proprietary data to any **subsequent** applicant. **However, the FAA is not** obligated to determine if less substantiation is warranted just because the

c. applicant **claims** similarity. An acceptable **example** is when knowledge regarding methods of **compliance**, previous **findings** of **compliance**, **changes** to policy as a result of **previous approvals**, etc., and is used to **reduce** the **time** or effort of the FAA when making **findings** of **compliance** for subsequent **approvals**. A specific **example** is where the FAA utilizes its **knowledge** of a **previously approved project** to **minimize** the **scope** of the test **requirements** to **accomplish** only the critical **conditions**.

8. **PROCEDURES**. These procedures are intended to assist the FAA **certification engineer** by **reducing** the **effort necessary** to make the **findings** of **compliance** required by the **regulations**, and not by **eliminating** any required findings. The following procedures pertain to the **submittal** of a **previous applicant's substantiating data** in **obtaining an approval** of a **subsequent STC** and the use of FAA **knowledge** in defining the **scope** of the substantiation required. The FAA's **knowledge**, gained **from experience** and education, may be used to relieve its **own effort** to make a **finding** that the current applicant has shown **compliance** to a specific requirement when:

a. Requiring **analyses** and doing tests **would not contribute** to the assurance of the safety of the altered product; and

b. The FAA is able to **ensure** that the level of safety of the **altered product** is equal to that required by the applicable **airworthiness** **requirement**.

c. These **procedures** apply when there is similarity of a design change to a **previous** design change that has been **approved** by the FAA. As used herein, similarity means that a given set of substantiating **data would** be applicable to either the **previous applicant's** or the current applicant's design change. The **descriptive data** defining these design **changes consist** of **drawings**, specifications, and a listing of those drawings and specifications necessary to define the configuration and the design features of the change shown to **comply** with the **airworthiness requirements**. These **data must be adequate** to allow, by **comparison**, the **determination** of the **airworthiness** of later **products** of the same type. This similarity must be established by the **current applicant** and **accepted** by the FAA before this **procedure** can be used. It is also the current applicant's **responsibility**, and not the **FAA's**, to state which regulations that these **substantiating data** will be applied to for the purpose of showing **compliance**.

d. An applicant, in showing **compliance** with the applicable **requirements** described in FAR § 21.115(a), may use **previously approved substantiating data** to assist in the **showing** of that **compliance**, if the applicant:

(1) **Submits** the previous applicant's **approved substantiating data**, including flight **test data**, which are applicable and **acceptable** to the current project. These **data must reflect** all applicable **AD's**. The applicant may use **these substantiating data** in the **showing** of **compliance** or in the derivation of its **own substantiating data**. If the submitted substantiating **data does, in fact, show compliance** to the applicable **requirements** for the

current project, **additional testing or analyses would not be minimized or required. Providing sufficient evidence to the FAA that the previous alteration has been FAA approved, by itself, does not comply with the requirement to submit data. These data must meet the STC file requirements of paragraph 5. and become the current applicant's responsibility as they pertain to the current project. The source of the current applicant's data is not a question that the FAA needs to address;**

(2) Shows that the **previously approved, substantiating data, referenced in (1) above, which was submitted was, in fact, approved by the FAA;**

(3) **Establishes that the previously approved data are applicable to its design to the extent that any design deviations will have no effect on the airworthiness of its design or on the showing of compliance with the applicable regulations for the current project. This evaluation is based upon the previous applicant's substantiating data being free of technical deficiencies. However, if deficiencies do exist in the previous applicant's substantiating data, they should be resolved with the previous applicant's cognizant FAA personnel prior to acceptance of the data for the current applicant. This resolution may include the need for the current applicant to make design changes or provide additional substantiating data;**

(4) Shows **compliance for any changes or additions to the previously approved substantiating data; and**

(5) Has sufficient engineering **data necessary to provide continued airworthiness information.**

e. An applicant, in **showing compliance with the applicable requirements described in FAR § 21.115(a), may be relieved of submitting substantiating data for certain requirements which are found unnecessary by the FAA. A conflict may arise when trying to determine when data is needed and when, through FAA's knowledge obtained from previous projects, it is not needed. If doubt exists, the data should be required. The FAA may minimize or waive the need for the current applicant to provide substantiating data for certain requirements if:**

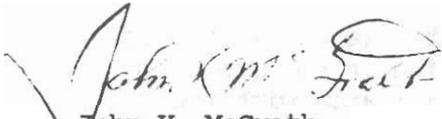
(1) **The change, including areas and components affected by the change, are not affected by the requirements; or**

(2) **Through knowledge, the FAA is certain of the outcome and can ensure that doing tests or requiring analyses would not contribute to the assurance of the safety of the altered product. The basis for this procedure may lie in the FAA knowledge gained from previous certification projects provided that, in applying this knowledge, the FAA does not indirectly allow the application of another applicant's proprietary data; and**

(3) A brief rationale that supports the above actions is provided and inserted in the project file. This rationale must include sufficient information to provide traceability to the previous project.

f. Section 21.33, Inspection and Tests, applies regardless of the data used for showing compliance to the regulations. However, previously approved substantiating data may be used by the FAA project personnel to assist in defining which inspections and tests, if any, are necessary.

9. DOCUMENTATION. The guidance contained in this notice will be incorporated in AC 21.XX, Type Certification, which is currently be — developed.



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