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Circular

Director, Airworthiness Division
Aviation Safety and Security Department
Civil Aviation Bureau
Ministry of Land, Infrastructure, Transport and Tourism

Subject: Guidelines for handling special requirements, equivalent safety, and exclusion of application

1. Application

This circular applies when the Civil Aviation Bureau implements type certification etc. of domestic aircraft as an alternative to conformation to the airworthiness examination procedures according to circular No. 1-003, "Type Certification etc. of Domestic Aircrafts," in cases where (a part of) special requirements and equivalent safety apply or an application (or part) thereof is excluded.

2. Purpose

The necessity of special requirements etc. and the application thereof are determined from the characteristics etc. of the design of an aircraft etc. A purpose of this circular is to define the guidelines and detailed procedures applicable when a decision is made in relation to the application thereof.

The application of the procedure defined in this circular is related to the specification of the procedure of the examination to be applied. Therefore, the applicant is recommended to make a deliberate study at the design stage and that a sufficient explanation and a sufficient arrangement are made with the Civil Aviation Bureau before the procedure is started in order to avoid redundancy in the procedure.

3. Special requirement

A special requirement is provided in cases where the characteristics of the design of an aircraft etc. are the object of a type certification etc. and there is no appropriate procedure equivalent to the current procedure for proving conformity to an airworthiness standard.

This requirement is applied to design characteristics of a specific type but is not intended to revise the present airworthiness examination procedure. Therefore, this requirement does not apply to any other types.

When the Civil Aviation Bureau judges that a provided special requirement is necessary for the enhancement of safety, the special requirement shall be involved in the airworthiness examination procedure via a prescribed procedure.

3-1 Setting procedure

When the Civil Aviation Bureau is to set a special requirement, the Civil Aviation Bureau issues an opinion report on conformity (hereinafter referred to as opinion report).

When the Civil Aviation Bureau judges that an unprecedented design requiring an application of a special requirement is used for an aircraft, or that an extraordinary design is used for an aircraft, the Civil Aviation Bureau drafts an opinion report with respect to such a case. Furthermore, the Civil Aviation Bureau consults with the applicant and forwards the case to type certification-screening panel before closing this case.

While the Civil Aviation Bureau drafts an opinion report, the Civil Aviation Bureau, as necessary, may make a request with an external research institution or the like for the specification of the special requirement and for the acceptability thereof to have advice on the formulation.

When a special requirement is to be applied, the Civil Aviation Bureau follows the procedure as a part of an applicable standard for drafting the special requirement and notifies the applicant thereof. After the special requirement is set, the Civil Aviation Bureau shall describe the special requirement in the TC data sheet.

3-2 Procedure for revision

When a revision of a draft of a special requirement already set in the procedure of a type certification inspection is necessary, the draft shall be revised according to the procedure in section 3-1.

4. Equivalent safety

When strictly applying part or whole of a latest airworthiness examination procedure is remarkably difficult, and when some other method is capable of providing a proof equivalent to that provided from the latest procedure with respect to the conformity to an applicable standard, the application of the equivalent safety shall be adopted with respect to the method.

4-1 Setting procedure

When it is necessary to set an equivalent safety, the applicant shall submit an evaluation result and an examination result to the Civil Aviation Bureau regarding the security of safety.

The Civil Aviation Bureau shall examine the evaluation result and the examination result provided by the applicant. When the Civil Aviation Bureau judges that it is necessary to apply equivalent safety, the Civil Aviation Bureau shall draft an opinion report with respect to this case. The Civil Aviation Bureau consults with the applicant and forwards the case to the type-certification screening panel before closing this case.

The Civil Aviation Bureau may make a request, as necessary, with an external research institution or the like for the specification of the safety requirement and for the acceptability thereof to have advice.

When equivalent safety is applied, the Civil Aviation Bureau shall follow the procedure to determine the equivalent safety as part of an applicable standard and notifies the applicant thereof. Furthermore, the Civil Aviation Bureau shall describe the equivalent safety in the TC data sheet.

4-2 Procedure for revision

When a revision of an equivalent safety already settled in the procedure of a type certification inspection is necessary, the equivalent safety is revised according to the procedure in section 4-1.

5. Exclusion of application

An exclusion of application is a process to exclude an application when it is impossible or remarkably difficult to apply part or whole of the latest airworthiness examination procedure strictly and when the safety demanded in the airworthiness standard is secured without the certification provided by the application thereof. An exclusion of application may be applied temporarily or permanently.

An application of an exclusion of application should only be considered when a

method of proving conformity to an applicable standard cannot be presented even by an examination of an equivalent safety, and only when safety is secured. Easy applications for an exclusion of application are to be avoided.

5-1 Setting procedure

When it is necessary to provide an exclusion of application, the applicant shall submit an examination result and the like to the Civil Aviation Bureau regarding the necessity of an exclusion of application and the security of safety at the time of adopting an exclusion of application.

After the Civil Aviation Bureau examines the examination result provided by the applicant, when the Civil Aviation Bureau judges that it is necessary to apply an exclusion of application, the Civil Aviation Bureau shall draft an opinion report with respect to the case. The Civil Aviation Bureau may consult with the applicant and forwards the case to the type-certification screening panel before closing the case for drafting an opinion report.

The Civil Aviation Bureau may make a request, as necessary, with an external research institution or the like for researching and investigating the specifics of the exclusion of the application and the acceptability and advice on the formulation thereof.

When an exclusion of application is settled, the Civil Aviation Bureau shall follow the procedure for determining the setting of the exclusion of application as a part of an applicable standard and notifies the applicant thereof. Furthermore, the Civil Aviation Bureau shall describe the exclusion of application in the TC data sheet.

5-2 Procedure for revision

When it is necessary to revise an exclusion of application settled in a process of a type certification inspection, the revision shall be made according to the procedure in section 5-1.

6. Miscellaneous

Regardless of the regulations in sections 3, 4, and 5, it is possible to manage a special requirement, an equivalent safety, and an exclusion of application with some other method when the Director of the Aircraft Engineering and Certification Center recognizes the necessity thereof.

Supplementary Provisions

1. This Circular shall be enforced on October 1, 2005.

Supplementary Provisions (June 30, 2011)

1. This Circular shall be enforced on July 1, 2011.

Please contact for questions or comments regarding this Circular to:
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