

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 25**

[Docket No. FAA-2002-11345; Amdt. No. 25-112]

RIN 2120-AH36

Revised Requirement for Material Strength Properties and Design Values for Transport Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This rule amends the airworthiness standards for transport category airplanes concerning material strength properties and material design values. It incorporates changes developed in cooperation with the Joint Aviation Authorities of Europe and the U.S. and European aviation industry through the Aviation Rulemaking Advisory Committee (ARAC). This action is necessary because differences between the current U.S. and European requirements impose unnecessary costs on airplane manufacturers. Issuing this amendment eliminates regulatory differences between the airworthiness standards of the U.S. and the Joint Aviation Requirements of Europe, without affecting current industry design practices.

DATES: Effective September 4, 2003.

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SUPPLEMENTARY INFORMATION:

How Can I Obtain a Copy of This Final Rule?

You can get an electronic copy using the Internet by:

- (1) Searching the Department of Transportation's electronic Docket Management System (DMS) web page (<http://dms.dot.gov/search>).
- (2) Visiting the Office of Rulemaking's web page at <http://www.faa.gov/avr/arm/nprm.cfm?nav=nprm>; or
- (3) Accessing the Government Printing Office's web page at http://www.access.gpo.gov/su_docs/aces/aces140.html.

You can also get a copy by submitting a request to the Federal Aviation Administration, Office of Rulemaking, ARM-1, 800 Independence Avenue SW., Washington, DC 20591, or by

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Small Business Regulatory Enforcement Fairness Act

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Background

What Are the Relevant Airworthiness Standards in the United States?

In the United States, Title 14, Code of Federal Regulations (CFR) part 25 contains the airworthiness standards for type certification of transport category airplanes. Manufacturers of transport category airplanes must show that each airplane they produce of a different type design complies with the appropriate part 25 standards. These standards apply to—

- Airplanes manufactured within the U.S. for use by U.S.-registered operators; and
- Airplanes manufactured in other countries and imported to the U.S. under a bilateral airworthiness agreement.

What Are the Relevant Airworthiness Standards in Europe?

In Europe, Joint Aviation Requirements (JAR)-25 contains the airworthiness standards for type certification of transport category airplanes. The Joint Aviation Authorities (JAA) of Europe developed these standards, based on part 25, to provide a common set of airworthiness standards within the European aviation community. Twenty-three European countries accept airplanes type certificated to the JAR-25 standards, including airplanes manufactured in the U.S. that are type certificated to JAR-25 standards for export to Europe.

What Is "Harmonization" and How Did It Start?

Although part 25 and JAR-25 are very similar, they are not identical in every respect. When airplanes are type certificated to both sets of standards, the differences between part 25 and JAR-25 can result in substantial added costs to

manufacturers and operators. These added costs, however, often do not bring about an increase in safety. In many cases, part 25 and JAR-25 may contain different requirements to accomplish the same safety intent. Consequently, manufacturers are usually burdened with meeting the requirements of both sets of standards without a corresponding increase in the level of safety.

Recognizing that a common set of standards would not only benefit the aviation industry economically, but also maintain the necessary high level of safety, the FAA and the JAA began an effort in 1988 to "harmonize" their respective aviation standards. The goal of the harmonization effort is to ensure that—

- Where possible, standards do not require domestic and foreign parties to manufacture or operate to different standards for each country involved; and
- The standards adopted are mutually acceptable to the FAA and the foreign aviation authorities.

The FAA and JAA have identified a number of significant regulatory differences (SRD) between the wording of part 25 and JAR-25. Both the FAA and the JAA consider "harmonization" of the two sets of standards a high priority.

What Is ARAC and What Role Does It Play in Harmonization?

After initiating the first steps towards harmonization, the FAA and JAA soon realized that traditional methods of rulemaking and accommodating different administrative procedures was neither sufficient nor adequate to make noticeable progress towards fulfilling the harmonization goal. The FAA identified the Aviation Rulemaking Advisory Committee (ARAC) as an ideal vehicle for helping to resolve harmonization issues and, in 1992, the FAA tasked ARAC to undertake the entire harmonization effort.

The FAA had formally established ARAC in 1991 (56 FR 2190, January 22, 1991), to provide advice and recommendations on the full range of the FAA's safety-related rulemaking activity. The FAA sought this advice to develop better rules in less overall time and using fewer FAA resources than previously needed. The committee provides the FAA firsthand information and insight from interested parties regarding potential new rules or revisions of existing rules.

There are 74 member organizations on the committee, representing a wide range of interests within the aviation community. Meetings of the committee