

Small Business Regulatory Enforcement Fairness Act of 1996

This rule is not a major rule as defined by section 804 of the Small Business Regulatory Enforcement Act of 1996. This rule will not result in an annual effect on the economy of \$100 million or more; a major increase in cost or prices; or significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based companies to compete with foreign-based companies in domestic and export markets.

Executive Order 12866

This rule is not considered by the Department of Justice, Immigration and Naturalization Service, to be a "significant regulatory action" under Executive Order 12866, section 3(f), Regulatory Planning and Review, and the Office of Management and Budget has waived its review under section 6(a)(3)(A).

Executive Order 12612

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

Executive Order 12988

This interim rule meets the applicable standards set forth in section 3(a) and 3(b)(2) of E.O. 12988.

Paperwork Reduction Act

This interim rule does not impose any new reporting or recordkeeping requirements. The information collection requirements contained in this rule have previously been approved for use by the Office of Management and Budget under the paperwork Reduction Act. The OMB control numbers for these collections are contained in 8 CFR 299.5, Display of control numbers.

Lists of Subjects in 8 CFR Part 245

Aliens, Immigration, Reporting and recordkeeping requirements.

Accordingly, part 245 of chapter I of title 8, the Code of Federal Regulations is amended as follows:

PART 245—ADJUSTMENT OF STATUS TO THAT OF PERSON ADMITTED FOR PERMANENT RESIDENCE

1. The authority citation for part 245 continues to read as follows:

Authority: 8 U.S.C. 1101, 1103, 1182, 1255; 8 CFR part 2.

2. Section 245.12 is added to read as follows:

§ 245.12 Adjustment of status of certain Polish and Hungarian parolees under the Illegal Immigration Reform and Immigrant Responsibility Act of 1996.

(a) *Application.* Each person applying for adjustment of status under section 646(b) of Pub. L. 104-208 must file a completed Form I-485, Application to Register Permanent Residence or Adjustment Status, accompanied by the appropriate filing fee, with the district director having jurisdiction over the applicant's place of residence. Each application shall be accompanied by specific evidence that the applicant meets the requirements for eligibility under section 646 of Pub. L. 104-208; a Form I-643, Health and Human Services Statistical Data; the results of the medical examination made in accordance with § 245.5; Form G-325A, Biographic Information, and, unless the applicant is under the age of 14 years or over the age of 79 years, a properly executed Form FD-258, Fingerprint Card.

(b) *Effect of departure.* Departure from the United States by an applicant for benefits under this provision shall be deemed an abandonment of the application as provided in § 245.2(a)(4)(ii).

Dated: May 6, 1997.

Doris Meissner,

Commissioner, Immigration and Naturalization Service.

[FR Doc. 97-13594 Filed 5-22-97; 8:45 am]

BILLING CODE 4410-10-M

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

[Docket No. NM-133; Special Conditions No. 25-ANM-127]

Special Conditions: Jetstream Aircraft Limited, Jetstream Model 4100 Series Airplanes, Passenger Airbag Installation

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final special conditions.

SUMMARY: These special conditions are to be issued to Jetstream Aircraft Limited of Prestwick, Scotland (formerly British Aerospace Public Limited Company (BAe)) for the Jetstream Model 4100 series airplanes. This airplane series has a novel or unusual design feature associated with the installation of passenger airbags. Since the applicable airworthiness regulations do not contain adequate or appropriate safety standards for this particular design feature, these special conditions contain the additional safety standards which the Administrator finds necessary to establish a level of safety equivalent to that established by the airworthiness standards for transport category airplanes.

EFFECTIVE DATE: June 23, 1997.

FOR FURTHER INFORMATION CONTACT: Jeff Gardlin, Regulations Branch, ANM-114, Transport Airplane Directorate, Aircraft Certification Service, FAA, 1601 Lind Avenue SW., Renton, Washington 98055-4056; telephone (206) 227-2136.

SUPPLEMENTARY INFORMATION:**Background**

On May 24, 1989, BAe Public Limited Company (currently Jetstream Aircraft Ltd.) applied for a type certificate for the BAe Model 4100 (currently Jetstream Model 4101) airplane in the transport airplane category. The Model 4100 is a derivative of the Model 3100, which is a small airplane as defined by 14 CFR part 1, and is certificated under the provisions of 14 CFR part 23. Like the Model 3100, the Model 4100 was a low wing, twin engine turbo-prop design. The FAA issued Type Certificate (TC) A41NM for the Jetstream Model 4101 airplane on April 9, 1993. The TC includes Exemption 5587 from compliance with the head injury criteria (HIC) requirements in 14 CFR § 25.562 for the front row of passenger seats.

Section 25.562 specifies that dynamic tests must be conducted for each seat type installed in the airplane. The pass/fail criteria for these seats include structural as well as human tolerance criteria. In particular the regulations require that persons not suffer serious head injury under the conditions specified in the tests, and that a HIC measurement of not more than 1000 units be recorded, should contact with the cabin interior occur. The HIC is based on physiological data, and was first introduced in the automotive industry. At the time the rule was written, compliance with the HIC requirement was expected to involve using energy absorbing pads, upper torso restraints, or increasing spacing between seats and interior features. In

the years following publication of the rule, the requirement has proven difficult to comply with using "conventional" means, and there has been commercial resistance to installation of upper torso restraint for passengers. Because of the technical problems, BAe and other manufacturers were granted temporary exemptions to allow certification of their airplanes while design solutions were developed.

One design solution that appeared to be impractical early in its adaptation to aircraft was airbags, even though airbags are widely used in automobiles as a supplemental restraint system. While the service history in automobiles is quite good, the operating environment and conditions of use in aircraft are quite different from automobiles. The FAA will not enumerate the differences here, but they include exposure to electromagnetic fields, wear and tear considerations, crash sensing systems etc., and did serve to help frame the content of the special conditions. In any case, airbags were not envisioned as a means of compliance with the FAR, and the rules are not adequate to define the necessary criteria. Therefore, special conditions are necessary.

Airbags have two potential advantages over other means of head impact protection. They essentially provide equivalent protection for all sizes of occupants and they can provide significantly greater protection than would be expected with energy absorbing pads, for example. These are significant advantages from a safety standpoint, since airbags will likely provide a level of safety that exceeds the minimum standards of the Federal Aviation Regulations (FAR). Conversely, airbags are an active system, and must be relied upon to activate properly when needed, as opposed to an energy absorbing pad or upper torso restraint that is always available. These potential advantages must be balanced against the potential problems in order to develop standards that will provide an equivalent level of safety to that intended by the regulations.

The FAA has considered the installation of airbags to have two primary safety concerns: first, that they perform properly under foreseeable operating conditions and second, that they do not perform in a manner or at such times as would constitute a hazard to the airplane or occupants. This latter point has the potential to be the more rigorous of the requirements, owing to the active nature of the system. With this philosophy in mind, the FAA has considered the following as a basis for the special conditions.

The airbag will rely on electronic sensors for signaling, and pyrotechnic charges for activation so that it is available when needed. These same devices could be susceptible to inadvertent activation, causing deployment in a potentially unsafe manner. The consequences of such deployment must be considered in establishing the reliability of the system. For example, there is subjective evidence that there may be transient overpressure (shock) caused by deployment of the airbag. Jetstream must substantiate that the effects of an inadvertent deployment in flight are either not a hazard to the airplane, or that such deployment is an extremely improbable occurrence (less than 10^{-9} per flight hour). The effect of an inadvertent deployment on a passenger that might be positioned close to the airbag should also be considered. The person could be either standing or sitting. A minimum reliability level will have to be established for this case, depending upon the consequences, even if the effect on the airplane is negligible.

The potential for an inadvertent deployment could be increased as a result of conditions in service. For example, an airbag installed in a galley wall or windscreen will be subjected to wear and tear associated with loading the galley and rough contact from baggage during aircraft boarding, etc. Whether or not these conditions are more severe than in the automotive world, the installation must take into account wear and tear so that the likelihood of an inadvertent deployment is not increased to an unacceptable level. In this context, an appropriate inspection interval and self-test capability are considered necessary. Other outside influences are high intensity electromagnetic fields and lightning. Since the sensors that trigger deployment are electronic, they must be protected from the effects of these threats. Existing Special Conditions No. 25-ANM-48 are therefore incorporated by reference. For the purposes of compliance with those special conditions, if inadvertent deployment could cause a hazard to the airplane, the airbag is considered a critical system; to the extent that injuries to persons could result from inadvertent deployment, the airbag should be considered an essential system. Finally, the airbag installation should be protected from the effects of fire, so that an additional hazard is not created by, for example, a rupture of the pyrotechnic squib.

In order to be an effective safety system, the airbag must function properly and must not introduce any additional hazards to occupants as a

result of its functioning. There are several areas where the airbag differs from traditional occupant protection systems, and requires special conditions to ensure adequate performance.

Because the airbag is essentially a single use device, there is the potential that it could deploy under crash conditions that are not sufficiently severe as to require head injury protection from the airbag. Since an actual crash is frequently composed of a series of impacts, this could render the airbag useless if a larger impact follows the initial impact. This situation does not exist with energy absorbing pads or upper torso restraints, which tend to provide protection proportional to the severity of the impact. Therefore, the airbag installation should be such that the airbag will provide protection when it is required, and will not expend its protection when it is not needed. There is no requirement for the airbag to provide protection for multiple impacts, where more than one impact would require protection.

The airbag will also potentially serve more than one occupant although, since seats could be unoccupied, this may not always be the case. It will be necessary to show that the required protection is provided for each occupant regardless of the number of occupied seats.

Since a seat could be occupied by a wide range of occupants, the airbag should be effective for a wide range of occupants. The FAA has historically considered the range from the 5th percentile female to the 95th percentile male as the range of occupants that must be taken into account. In a similar vein, these persons could have assumed the brace position, for those accidents where an impact is anticipated. Test data indicate that occupants in the brace position do not require supplemental protection, and so it would not be necessary to show that the airbag will enhance the brace position. However, the airbag must not introduce a hazard in that case by deploying into the seated, braced occupant.

Since the airbag will be electrically powered, there is the possibility that the system could fail due to a separation in the fuselage. Since this system is intended as crash/post-crash protection means, failure due to fuselage separation is not acceptable. As with emergency lighting, the system should function properly if such a separation occurs, at any point in the fuselage. A separation that occurs at the location of the airbag would not have to be considered.

Since the airbag is likely to have a large volume displacement, the inflated bag could potentially impede egress of

passengers. Since the bag deflates to absorb energy, it is likely that an airbag would be deflated at the time that persons would be trying to leave their seats. Nonetheless, it is considered appropriate to specify a time interval after which the airbag may not impede rapid egress. Ten seconds has been chosen as a reasonable time since this corresponds to the maximum time allowed for an exit to be openable. In actuality, it is unlikely that an exit would be prepared this quickly in an accident severe enough to warrant deployment of the airbag, and the airbag will likely deflate much quicker than ten seconds. Since the Jetstream 4101 does not have an airbag installed at an exit passageway, the case where the seats are unoccupied is not critical.

Type Certification Basis

Under the provisions of 14 CFR 21.101, Jetstream must show that airbag-equipped 4100 series airplanes comply with the regulations in the U.S. type certification basis established for the Jetstream Model 4101 airplane. The U.S. type certification basis for the Model 4101 is established in accordance with 14 CFR 21.29 and 21.17 and the type certification application date. The U.S. type certification basis is as follows:

- 14 CFR part 25 dated February 1, 1965, as amended by Amendments 25-1 through 25-66 (based on the BAe application date to CAA-UK for TC), and
- 14 CFR part 25, Amendments 25-67, 25-68, 25-69, 25-70, and 25-71, and
- 14 CFR part 25, §§ 25.361, 25.729, 25.571(e)(2), 25.773(b)(2) and 25.905(d), all as amended by Amendment 25-72, and
- 14 CFR part 25, § 25.1419 as amended by Amendments 25-1 through 25-66 (BAe elected to comply with this requirement), and
- Special Conditions No. 25-ANM-48 issued August 29, 1991, Lightning and High Intensity Radiated Fields (HIRF), and
- Other special conditions
- FAA Exemptions as follows:
 - Exemption No. 5587 issued January 13, 1993, head impact criteria (25.562(c)(5)) for the three most forward passenger seats in the passenger cabin (Note: Exemption number 5587 is a time limited exemption that expires at the date specified therein unless extended by the FAA Transport Airplane Directorate.), and
- FAA Equivalent Safety Findings
- 14 CFR part 34 effective September 10, 1990, and

—14 CFR part 36 effective December 1, 1969 as amended by Amendments 36-1 through 36-18 including Appendices A, B and C.

If the Administrator finds that the applicable airworthiness regulations (i.e., 14 CFR part 25 as amended) do not contain adequate or appropriate safety standards for Jetstream 4100 series airplanes because of a novel or unusual design feature, special conditions are prescribed under the provisions of 14 CFR 21.16 to establish a level of safety equivalent to that established in the regulations.

In addition to the applicable airworthiness regulations and special conditions, the Jetstream Model 4100 must comply with the fire and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36.

Special conditions, as appropriate, are issued in accordance with 14 CFR 11.49 after public notice, as required by 14 CFR 11.28 and 11.29(b), and become part of the type certification basis in accordance with 14 CFR 21.17(a)(2).

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, or should any other model already included on the same type certificate be modified to incorporate the same novel or unusual design feature, the special conditions would also apply to the other model under the provisions of § 21.101(a)(1).

Novel or Unusual Design Features

The Jetstream Model 4100 series airplanes will incorporate the following novel or unusual features:

The Jetstream Model 4100 series airplanes will utilize airbags to provide head injury protection for occupants seated behind interior walls and furnishings. The airbags will be activated by acceleration sensors that integrate the acceleration time history to determine whether the bag should be deployed. Inflation of the bag is accomplished by firing of a small pyrotechnic device.

The FAR state the performance criteria for head injury protection in objective terms, and contain more specific criteria for systems and equipment. None of these criteria are adequate, however, to address the specific issues raised by airbags. The FAA has therefore determined that, in addition to the requirements of 14 CFR part 25, special conditions are needed to address requirements particular to an airbag installation.

From the standpoint of a passenger safety system, the airbag is unique in that it is both an active and entirely autonomous device. While the automotive industry has good experience with airbags, the conditions of use and reliance on the airbag as the sole means of injury protection are quite different. In automobile installations, the airbag is a supplemental system and works in conjunction with an upper torso restraint. In addition, the crash event is more definable and of typically shorter duration, which can simplify the activation logic. The airplane operating environment is also quite different from automobiles and includes the potential for greater wear and tear, and unanticipated abuse conditions (due to galley loading, passenger baggage, etc.); airplanes also operate where exposure to high intensity electromagnetic fields could affect the activation system.

The following proposed special conditions can be characterized as addressing either the safety performance of the system, or the system's integrity against inadvertent activation. Because a crash requiring use of the airbags is a relatively rare event, and because the consequences of an inadvertent activation are potentially quite severe, these latter requirements are probably the more rigorous from a design standpoint.

Accordingly, in addition to the requirements of 14 CFR 25.562 and 25.785, these special conditions are issued for the Jetstream 4101 airplane with a passenger airbag installation. Other conditions may be developed as needed based on further FAA review and discussions with the manufacturer and the Civil Aviation Authority (CAA).

Discussion of Comments

Notice of Proposed Special Conditions No. SC-91-4-NM for the Jetstream Aircraft Ltd. Model 4101 airplane was published in the **Federal Register** on October 15, 1996 (61 FR 53680). Comments were received from two labor organizations and Jetstream Aircraft Ltd. Both labor organizations support the issuance of the special conditions, but request that the FAA consider the use of upper torso restraint system in conjunction with the airbag. One of the commenters contends that upper torso restraints are not impractical, as implied in the Notice. While the use of upper torso restraints for passenger seats is not a trivial design problem, the FAA agrees that it can be practical, and is, in fact, in use for one manufacturer. Nonetheless, the standards in the regulation are objective, and compliance with these special conditions will neither mandate nor

preclude the use of upper torso restraints. The FAA cannot insist on a particular means of compliance. In this case, Jetstream has elected to show compliance with the requirements through the use of airbags, and these special conditions are promulgated to establish the appropriate certification criteria for airbags. Thus, the issue of whether upper torso restraints should be required is outside the scope of these special conditions.

Jetstream has commented that the requirement to accommodate occupants seated in the brace position should only apply to designs that have no deactivation feature. They contend that, in the case where a passenger would assume the brace position, there will be time to disable the airbag (since it wouldn't be needed for a person in the brace position), and therefore the requirement is not necessary for the Jetstream Model 4100. The FAA disagrees that the need to address the brace position is mitigated if the system has a deactivation capability. The possibility that a passenger will or will not be in the brace position cannot be disregarded, since the accident scenarios are unknown. The potential for a person to assume the brace position unnecessarily, as well as the potential for a person to fail to assume the brace position when necessary, must be considered. Therefore, the fact that the Jetstream system has a means to deactivate the system has no bearing on the proposed requirement. The requirement is adopted as proposed.

Applicability

As discussed above, these special conditions are applicable to the Jetstream Model 4100. Should Jetstream apply at a later date for a supplemental type certificate to modify any other model included on Type Certificate No. A41NM to incorporate the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of 14 CFR 21.101(a)(1).

Conclusion

This action affects only certain novel or unusual design features on one model of airplanes. It is not a rule of general applicability, and it affects only the manufacturer who applied to the FAA for approval of these features on the airplane.

List of Subjects in 14 CFR Part 25

Air transportation, Aircraft, Aviation safety, Safety.

The authority citation for these special conditions is as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

The Special Conditions

Accordingly, pursuant to the authority delegates to be by the Administrator, the following special conditions are issued as part of the type certification basis for the Jetstream Aircraft Limited, Jetstream Model 4100 Series Airplanes:

1. It must be shown that inadvertent deployment of the airbag, during the most critical part of the flight, will either not cause a hazard to the airplane or is extremely improbable.

2. It must be shown that an inadvertent deployment that could cause injury to a standing or sitting person, is improbable.

3. For the purposes of complying with Special Conditions No. 25-ANM-48, high intensity radiated fields (HIRF), the airbag system is considered a "critical system" if its deployment could have a hazardous effect on the airplane; otherwise it is considered an "essential" system.

4. It must be shown that the airbag system is not susceptible to inadvertent deployment as a result of wear and tear or inertial loads resulting from inflight or ground maneuvers (including gusts and hard landings) likely to be experienced in service.

5. It must be shown that the airbag will deploy and provide protection under crash conditions where its use is necessary to prevent serious head injury.

6. It must be shown that the airbag will not be a hazard to occupants that are in the brace position when it deploys.

7. The airbag must provide adequate protection for each occupant regardless of the number of occupants of the seat assembly.

8. It must be shown that the airbag will not impede rapid egress of occupants after 10 seconds following its deployment.

9. It must be shown that the airbag will not release hazardous quantities of gas or particulate matter into the cabin.

10. The airbag must function properly after loss of normal electrical power, and after a transverse separation of the fuselage at the most critical location.

11. The airbag installation must be protected from the effects of fire such that no hazard to occupants will result.

12. There must be a means, that is operable by a crewmember, to verify the integrity of the airbag activation system.

Issued in Renton, Washington, on May 14, 1997.

Stewart R. Miller,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service, ANM-100.

[FR Doc. 97-13588 Filed 5-22-97; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 95-CE-44-AD; Amendment 39-10017; AD 97-10-05]

Airworthiness Directives; Jetstream Aircraft Limited HP137 Mk1, Jetstream Series 200, and Jetstream Models 3101 and 3201 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to certain Jetstream Aircraft Limited (JAL) HP137 Mk1, Jetstream series 200, and Jetstream Models 3101 and 3201 airplanes. This AD requires repetitively inspecting the main landing gear (MLG) pintle to cylinder interface area for cracks, and replacing any MLG cylinder where a crack of any length is found in the MLG pintle to cylinder interface area. This AD results from reports of MLG cracks in the area of the pintle to cylinder interface on three of the affected airplanes. The actions specified by this AD are intended to prevent failure of the MLG caused by cracks in the pintle to cylinder interface area, which could result in loss of control of the airplane during landing operations.

DATES: Effective July 11, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 11, 1997.

ADDRESSES: Service information that applies to this AD may be obtained from Jetstream Aircraft Limited, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, telephone (44-292) 79888; facsimile (44-292) 79703; or Jetstream Aircraft Inc., Librarian, P.O. Box 16029, Dulles International Airport, Washington, D.C. 20041-6029; telephone (703) 406-1161; facsimile (703) 406-1469. This information may also be examined at the Federal Aviation Administration (FAA), Central Region, Office of the Assistant Chief Counsel, Attention: Rules Docket 95-