

43. "Preventing Cross-Contamination of Meat Products Heat-Processed to 130 Degrees F. or Higher and Poultry Products Processed to 155 Degrees F. or Higher by Other Products not Similarly Heat Processed" (8/14/91; 56 FR 40274)

44. "Streamlined Inspection System-Cattle and Staffing Standards" (11/30/88; 53 FR 48262)

45. "Policy for Differentiating Between Calves and Adult Cattle" (8/27/93; 58 FR 45296)

Comments regarding the withdrawal of these proposed rules should be sent to the FSIS Docket Clerk (see **ADDRESSES**). If needed, FSIS will publish another notice addressing any comments received.

Done at Washington, DC on November 12, 1996.

Thomas J. Billy,
Administrator.

[FR Doc. 96-29448 Filed 11-15-96; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 25

[Docket No. NM-134; Notice No. SC-96-7-NM]

Special Conditions: Empresa Brasileira de Aeronautica S.A., (EMBRAER) Model EMB-145 Airplane; Thrust Reverser Systems

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed special conditions.

SUMMARY: This notice proposes special conditions for the Empresa Brasileira de Aeronautica S.A., (EMBRAER) Model EMB-145 airplane. This airplane will have a novel or unusual design feature associated with thrust reversers as optional equipment. This notice contains the additional safety standards which the Administrator considers necessary to establish a level of safety equivalent to that established by the airworthiness standards of Part 25 of the Federal Aviation Regulations (FAR).

DATES: Comments must be received on or before January 2, 1997.

ADDRESSES: Comments on this proposal may be mailed in duplicate to: Federal Aviation Administration, Office of the Assistant Chief Counsel, Attention: Rules Docket (ANM-7), Docket No. NM-134, 1601 Lind Avenue SW, Renton, Washington 98055-4056; or delivered in duplicate to the Office of the Assistant Chief Counsel at the above

address. Comments must be marked: Docket No. NM-134. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4:00 p.m.

FOR FURTHER INFORMATION CONTACT: Colin Fender, FAA, Flight Test and Systems Branch of the Transport Standards Staff, ANM-111, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue SW, Renton, Washington 98055-4056; telephone 206-227-2191.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of these proposed special conditions by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory docket or notice number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments will be considered by the Administrator before further rulemaking action on this proposal is taken. The proposals contained in this notice may be changed in light of the comments received. All comments received will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested parties. A report summarizing each substantive public contact with FAA personnel concerning this rulemaking will be filed in the docket. Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must include a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. NM-134." The postcard will be date/time stamped and returned to the commenter.

Background

EMBRAER first made application for a US Type Certificate for the Model EMB-145 on August 30, 1989, to the FAA Atlanta Aircraft Certification Office through the Brazilian Centro Técnico Aeroespacial (CTA). On June 2, 1992, EMBRAER filed for an extension of that application. The EMB-145 is a 50 passenger, pressurized, low-winged, "T" tailed, transport category airplane with retractable tricycle type landing gear. The airplane is powered by two Allison Model AE3007A high bypass ratio turbofan engines mounted on the aft fuselage, which are controlled by a Full Authority Digital Engine Control (FADEC). The cockpit will include a complete set of Electronic Flight Instrumentation and Engine Indication

and Crew Alerting Systems (EFIS and EICAS).

EMBRAER has proposed to certificate and market the EMB-145 with thrust reversers as optional equipment. Thrust reversers have been shown to play a significant role in reducing accelerate-stop distances on wet and contaminated runways and have contributed to the transport category airplane fleet's accelerate-stop safety record.

The establishment of the transport category airplane safety record, with regard to accelerate-stop and landing overruns, is tied to the availability of auxiliary braking means that are independent of wheel-brake, tire, and runway surface interaction. On early transport category airplanes with propellers driven by reciprocating engines or turbine power plants, auxiliary braking was provided by commanding the propellers to a reverse pitch position, causing a deceleration, rather than acceleration, of air through the propeller disk. Due to the large diameter of the propellers, this was quite an effective braking means. Though these early transport did not have the high operating speeds of today's jet fleet, they also did not benefit from the sophisticated wheel-brake antiskid systems available today. As runway friction conditions degrade to those associated with a surface covered by ice, even today's antiskid systems will provide little in the way of stopping force. As runway friction conditions degrade, the braking contribution of reverse pitch systems increase considerably.

As the first generation turbojet-powered transport category airplanes went into service in the latter half of the 1950s, thrust reverser systems were developed to provide this same type of auxiliary braking as reverse pitch propellers by reversing the engine exhaust flow. As powerplant technology evolved and low bypass ratio turbofan engines entered commercial service in the early 1960's, thrust reversers were developed to reverse both the fan and core exhaust flows, thus maintaining the availability of auxiliary braking. With the advent of large high bypass ratio turbofan engines in the late 1960s, many thrust reverser systems reversed the fan exhaust flow only, which provided a substantial auxiliary braking effect due to the majority of the total inlet flow going through the fan section. Numerous test programs, by both research organizations and aerospace manufacturers, have substantiated the increased stopping benefit provided by thrust reversers as runway surface friction conditions deteriorate.

The vast majority of jet-powered transport category airplanes in service have been of the large, passenger carrying variety. Research shows that with the exception of a very limited number of airplane types, some of which had considerably slower takeoff and landing speeds than their counterparts, all these large, passenger carrying, turbojet/turbofan-powered transports included thrust reverser systems as part of their basic design (i.e., as standard equipment). The last such aircraft certified without thrust reversers as part of the basic design was the British Aerospace 146 (BAE 146) in 1983. When the sheer numerical majority of these large transports is combined with their high-use operating environment, often requiring takeoffs and landings to be made on slippery runway surfaces, it is clear that thrust reversers must have played a role in establishing their excellent safety record.

It should also be noted that as the number of small transport category airplanes in service has increased, notably corporate jets and regional airliners, there has been an increasing tendency for these airplanes to be equipped with some type of thrust reversing system. Nearly all the regional airliners are turbopropeller-powered with reverse pitch capability, and an increasing number of corporate jets include thrust reversers as standard equipment.

The accelerate-stop and landing distances presented in the FAA approved Airplane Flight Manual (AFM) are determined from measurements of the various influential parameters taken during certification flight tests. These flight tests are accomplished by FAA test pilots (or manufacturers' Designated Engineering Representative (DER) test pilots) under controlled conditions on dry runways. In the operational environment, even on dry runways, the ability of an airplane to match the AFM accelerate-stop performance is based on many factors, including the correct and timely execution of procedures by the pilot and maximum stopping performance being available from the wheel braking system. As runway surface conditions degrade to wet, contaminated, or icy, the accompanying reduction in available friction will result in an increase in stopping distances, causing the wet runway accelerate-stop distances to exceed the dry runway accelerate-stop distances published in the AFM. Obviously, if the takeoff's runway length-limited as determined from the dry runway AFM accelerate-stop distances, and the runway surface

is anything but dry, the probability for an overrun accident is increased significantly. (This increased risk factor is acknowledged for the landing scenario in Part 121 of the FAR, the operating rules for air carriers and commercial operators of large aircraft, which requires an increase in the landing field length required for landings on wet runways.)

In the operating conditions described above, any additional braking means, such as thrust reversers, will be beneficial. This is particularly true since the braking contribution of reverse thrust increases as runway surface friction decreases. This inverse relationship between reverse thrust braking contribution and runway surface friction is further enhanced as ground speed increases.

Since 1990 the Transport Airplane Directorate (TAD) has been developing new Part 25 accelerate-stop criteria that includes accountability for the degradation in stopping force due to wet runway surfaces. Test results obtained from several research organizations showed a fixed stopping distance factor of two, relative to dry runway stopping distances, to be representative of what could be expected in normal operations. The proposed accelerate-stop standards, published as Notice of Proposed Rulemaking (NPRM) 93-8, assumed a similar degradation in braking by prescribing a wet/dry braking coefficient of friction ratio of one-half (i.e., $\mu_{WET}=0.5 \mu_{DRY}$) as the primary basis for calculating wet runway accelerate-stop distances. An integral part of the proposed wet runway accelerate-stop rule is credit for the amount of reverse thrust available (provided certain reliability and controllability criteria are met).

The accelerate-stop certification basis for the EMB-145 is § 25.109 of the FAR as amended by Amendment 25-42, effective March 1, 1978. Thrust reversing systems are not required by the FAR, and when installed, no performance credit is granted for their availability in the dry runway accelerate-stop distances required by § 25.109, as amended by Amendment 25-42, effective March 1, 1978. This airworthiness regulation only addresses dry runway performance and does not require thrust reversers or give performance credit for their availability. The vast majority of transport category airplanes in service at the time the regulatory changes of Amendment 25-42 were promulgated were equipped with thrust reversers. Consequently, the certification of transport category airplanes intended to be operated in Part 121-type commercial service

without thrust reversers was not envisaged at the time Amendment 25-42 was promulgated.

In consideration of the intended operation of the EMB-145, the FAA considers the non inclusion of thrust reversers into the basic airplane to be an unusual design feature that is not adequately addressed by the airworthiness regulations of Part 25 of the FAR and therefore proposes to apply a special condition to the EMB-145 in accordance with § 21.16 of the FAR. In accordance with the preamble material to Amendment 25-54 (page 274), addressing the definition of a novel or unusual design feature (as used in § 21.16), the non inclusion of thrust reversers in the basic EMB-145 design can be considered a "novel or unusual design feature since such designs were not envisaged at the time the current airworthiness standard (i.e., § 25.109, Amendment 25-42) was developed. This application requires the development of requirements not fully addressed by Part 25 nor by any published FAA guidance.

These special conditions provide all the necessary requirements to determine acceptability of the EMB-145 without the incorporation of thrust reversers.

Type Certification Basis

Under the provisions of § 21.101, Empresa Brasileira de Aeronautica S.A., must show that the Model EMB-145 meets the applicable regulations in effect on the date of application for the Model EMB-145. In addition, the certification basis includes certain other special conditions not relevant to this proposed special condition.

In addition, if the regulations incorporated by reference do not provide adequate standards will respect to the change, the applicant must comply with certain regulations in effect on the date of application for the change. The FAA has determined that the Model EMB-145 airplane must also be shown to comply with Part 25 as amended by Amendments 25-1 through 25-75.

If the Administrator finds that the applicable airworthiness regulations (i.e., Part 25 as amended) do not contain adequate or appropriate safety standards for the Model EMB-145 because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions, as appropriate, are issued in accordance with § 11.49 of the FAR after public notice, as required by §§ 11.28 and 11.29(b), and become part of the type certification basis in accordance with § 21.101(b)(2).

In addition to the applicable airworthiness regulation and special condition, the Model EMB-145 must comply with the fuel vent and exhaust emission requirements of Part 25 and the noise certification requirements of Part 36.

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 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 Model EMB-145 will have an unusual design feature which is the lack of incorporation of thrust reversers as standard equipment.

As described above, these special conditions are applicable to the EMB-145. Should Empresa Brasileira de Aeronautica S.A. apply at a later date for a change to the type of certificate to include another model incorporating the same novel or unusual design feature, the special conditions would apply to that model as well under the provisions of § 21.101(a)(1).

Conclusion

This action affects only certain novel or unusual design features on one model of airplane. 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 continues to read as follows:

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

The Proposed Special Conditions

Accordingly, the Federal Aviation Administration (FAA) proposes the following special conditions as part of the type certification basis for the Empresa Brasileira de Aeronautica S.A., Model EMB-145 airplanes.

1. Require Embraer to account for the effect of wet runway surfaces on accelerate-stop distances for the Model EMB-145 in accordance with criteria contained in NPRM 93-8 and its associated guidance.

2. Takeoff limitations for operation of the EMB-145 on wet runway surfaces must be predicted on the wet runway accelerate-stop criteria contained in NPRM93-8.

Issued in Renton, Washington, on November 7, 1996.

Darrell M. Pederson,

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

[FR Doc. 96-29481 Filed 11-15-96; 8:45 am]

BILLING CODE 4910-13-M

14 CFR Part 39

[Docket No. 96-NM-52-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Boeing Model 747 series airplanes. This proposal would require a one-time inspection to detect corrosion and cracking of the upper deck floor beam at station 980, and repair, if necessary. This proposal is prompted by reports of extensive corrosion found at station 980. Analysis of the corrosion indicated that fatigue cracking of the floor beam at this area could occur and cause the beam to break. The actions specified by the proposed AD are intended to detect and correct such corrosion and/or cracking, which could cause the floor beam to break and result in extensive damage to adjacent structure and possible rapid decompression of the airplane.

DATES: Comments must be received by December 30, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 96-NM-52-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Bob Breneman, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton,

Washington; telephone (206) 227-2776; fax (206) 227-1181.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 96-NM-52-AD." The postcard will be date stamped and returned to the commenter.

Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 96-NM-52-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The FAA has received reports of corrosion found under the threshold attached to the floor beam at the cart lift cutout in the upper deck floor at station 980 on several Boeing Model 747-300 and -400 series airplanes. The corrosion occurred where the stainless steel threshold contacts the aluminum floor structure. Analysis of an extensively corroded section of the station 980 floor beam, which had been removed from a 7-year old Model 747-400 series airplane, revealed that fatigue cracking could initiate at the corroded area and could propagate. The analysis further indicated that the floor beam could break at approximately 1,500 flight cycles after cracking was initiated. At