

modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To minimize the potential hazards associated with operating the airplane in severe icing conditions by providing more clearly defined procedures and limitations associated with such conditions, accomplish the following:

(a) Within 30 days after the effective date of this AD, accomplish the requirements of paragraphs (a)(1) and (a)(2) of this AD.

Note 2: Operators must initiate action to notify and ensure that flight crewmembers are apprised of this change.

(1) Revise the FAA-approved Airplane Flight Manual (AFM) by incorporating the following into the Limitations Section of the AFM. This may be accomplished by inserting a copy of this AD in the AFM.

#### "WARNING"

Severe icing may result from environmental conditions outside of those for which the airplane is certificated. Flight in freezing rain, freezing drizzle, or mixed icing conditions (supercooled liquid water and ice crystals) may result in ice build-up on protected surfaces exceeding the capability of the ice protection system, or may result in ice forming aft of the protected surfaces. This ice may not be shed using the ice protection systems, and may seriously degrade the performance and controllability of the airplane.

- During flight, severe icing conditions that exceed those for which the airplane is certificated shall be determined by the following visual cues. If one or more of these visual cues exists, immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the icing conditions.

- Unusually extensive ice accreted on the airframe in areas not normally observed to collect ice.

- Accumulation of ice on the lower surface of the wing aft of the protected area.

- Accumulation of ice on the propeller spinner farther aft than normally observed.

- Since the autopilot may mask tactile cues that indicate adverse changes in handling characteristics, use of the autopilot is prohibited when any of the visual cues specified above exist, or when unusual lateral trim requirements or autopilot trim warnings are encountered while the airplane is in icing conditions.

- All icing detection lights must be operative prior to flight into icing conditions at night. [NOTE: This supersedes any relief provided by the Master Minimum Equipment List (MMEL).]"

(2) Revise the FAA-approved AFM by incorporating the following into the Procedures Section of the AFM. This may be accomplished by inserting a copy of this AD in the AFM.

#### "THE FOLLOWING WEATHER CONDITIONS MAY BE CONDUCTIVE TO SEVERE IN-FLIGHT ICING"

- Visible rain at temperatures below 0 degrees Celsius ambient air temperature.
- Droplets that splash or splatter on impact at temperatures below 0 degrees Celsius ambient air temperature.

#### PROCEDURES FOR EXITING THE SEVERE ICING ENVIRONMENT

These procedures are applicable to all flight phases from takeoff to landing. Monitor the ambient air temperature. While severe icing may form at temperatures as cold as -18 degrees Celsius, increased vigilance is warranted at temperatures around freezing with visible moisture present. If the visual cues specified in the Limitations Section of the AFM for identifying severe icing conditions are observed, accomplish the following:

- Immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the severe icing conditions in order to avoid extended exposure to flight conditions more severe than those for which the airplane has been certificated.
- Avoid abrupt and excessive maneuvering that may exacerbate control difficulties.
- Do not engage the autopilot.
- If the autopilot is engaged, hold the control wheel firmly and disengage the autopilot.
- If an unusual roll response or uncommanded roll control movement is observed, reduce the angle-of-attack.
- Do not extend flaps during extended operation in icing conditions. Operation with flaps extended can result in a reduced wing angle-of-attack, with the possibility of ice forming on the upper surface further aft on the wing than normal, possibly aft of the protected area.
- If the flaps are extended, do not retract them until the airframe is clear of ice.
- Report these weather conditions to Air Traffic Control."

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM-113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Operations Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM-113.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM-113.

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to

a location where the requirements of this AD can be accomplished.

(d) This amendment becomes effective on June 11, 1996.

Issued in Renton, Washington, on April 24, 1996.

Ronald T. Wojnar,

Manager, Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 96-10773 Filed 5-1-96; 3:27 pm]

BILLING CODE 4910-13-P

## 14 CFR Part 39

[Docket No. 96-NM-19-AD; Amendment 39-9600; AD 96-09-24]

RIN: 2120-AA64

### Airworthiness Directives; Empresa Brasileira de Aeronautica, S.A. (EMBRAER) Model EMB-120 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to all EMBRAER Model EMB-120 series airplanes, that requires revising the Airplane Flight Manual (AFM) to provide the flight crew with recognition cues for, and procedures for exiting from, severe icing conditions, and to limit or prohibit the use of various flight control devices. This amendment is prompted by results of a review of the requirements for certification of the airplane in icing conditions, new information on the icing environment, and icing data provided currently to the flight crews. The actions specified by this AD are intended to minimize the potential hazards associated with operating the airplane in severe icing conditions by providing more clearly defined procedures and limitations associated with such conditions.

**EFFECTIVE DATE:** June 11, 1996.

**ADDRESSES:** Information pertaining to this rulemaking action may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** John W. McGraw, Aerospace Engineer, Flight Test/Systems Branch, ACE-116A, FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, Campus Building, 1701 Columbia Avenue, suite 2-160, College Park, Georgia 30337-2748; telephone (404) 305-7336; fax (404) 305-7348.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal

Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to all EMBRAER Model EMB-120 series airplanes was published in the Federal Register on January 25, 1996 (61 FR 2163). That action proposed to require revising the Airplane Flight Manual (AFM) to specify procedures that would prohibit flight in freezing rain or freezing drizzle conditions (as determined by certain visual cues), limit or prohibit the use of various flight control devices, and provide the flight crew with recognition cues for, and procedures for exiting from, severe icing conditions.

#### Disposition of Comments

For the disposition of comments on this rulemaking action, see Docket No. 95-NM-146-AD; Amendment 39-9604; AD 96-09-28, Airworthiness Directives; Aerospatiale Model ATR-42 and ATR-72 Series Airplanes, published elsewhere in this issue of the Federal Register.

#### Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

#### Cost Impact

The FAA estimates that 227 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$13,620, or \$60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

In addition, the FAA recognizes that this AD may impose operational costs. However, those costs are incalculable because the frequency of occurrence of the specified conditions and the associated additional flight time are indeterminable. Nevertheless, because of the severity of the unsafe condition addressed, the FAA has determined that continued operational safety necessitates the imposition of these costs.

#### Regulatory Impact

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 final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

#### Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

#### PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 USC 106(g), 40113, 44701.

##### § 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

96-09-24 EMBRAER: Amendment 39-9600. Docket 96-NM-19-AD.

*Applicability:* All Model EMB-120 series airplanes, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of

the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

*Compliance:* Required as indicated, unless accomplished previously.

To minimize the potential hazards associated with operating the airplane in severe icing conditions by providing more clearly defined procedures and limitations associated with such conditions, accomplish the following:

(a) Within 30 days after the effective date of this AD, accomplish the requirements of paragraphs (a)(1) and (a)(2) of this AD.

Note 2: Operators must initiate action to notify and ensure that flight crewmembers are apprised of this change.

(1) Revise the FAA-approved Airplane Flight Manual (AFM) by incorporating the following into the Limitations Section of the AFM. This may be accomplished by inserting a copy of this AD in the AFM.

#### "WARNING

Severe icing may result from environmental conditions outside of those for which the airplane is certificated. Flight in freezing rain, freezing drizzle, or mixed icing conditions (supercooled liquid water and ice crystals) may result in ice build-up on protected surfaces exceeding the capability of the ice protection system, or may result in ice forming aft of the protected surfaces. This ice may not be shed using the ice protection systems, and may seriously degrade the performance and controllability of the airplane.

- During flight, severe icing conditions that exceed those for which the airplane is certificated shall be determined by the following visual cues. If one or more of these visual cues exists, immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the icing conditions.

- Unusually extensive ice accreted on the airframe in areas not normally observed to collect ice.

- Accumulation of ice on the upper surface of the wing aft of the protected area.

- Accumulation of ice on the propeller spinner farther aft than normally observed.

- Since the autopilot may mask tactile cues that indicate adverse changes in handling characteristics, use of the autopilot is prohibited when any of the visual cues specified above exist, or when unusual lateral trim requirements or autopilot trim warnings are encountered while the airplane is in icing conditions.

- In icing conditions, use of flaps is restricted to takeoff, approach, and landing only. When the flaps have been extended for approach or landing, they may not be retracted unless the upper surface of the wing aft of the protected area is clear of ice, or unless flap retraction is essential for go-around.

- All icing detection lights must be operative prior to flight into icing conditions at night. [NOTE: This supersedes any relief provided by the Master Minimum Equipment List (M MEL).]"

(2) Revise the FAA-approved AFM by incorporating the following into the Procedures Section of the AFM. This may be accomplished by inserting a copy of this AD in the AFM.

**"THE FOLLOWING WEATHER CONDITIONS MAY BE CONDUCTIVE TO SEVERE IN-FLIGHT ICING**

- Visible rain at temperatures below 0 degrees Celsius ambient air temperature.
- Droplets that splash or splatter on impact at temperatures below 0 degrees Celsius ambient air temperature.

**PROCEDURES FOR EXITING THE SEVERE ICING ENVIRONMENT**

These procedures are applicable to all flight phases from takeoff to landing. Monitor the ambient air temperature. While severe icing may form at temperatures as cold as -18 degrees Celsius, increased vigilance is warranted at temperatures around freezing with visible moisture present. If the visual cues specified in the Limitations Section of the AFM for identifying severe icing conditions are observed, accomplish the following:

- Immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the severe icing conditions in order to avoid extended exposure to flight conditions more severe than those for which the airplane has been certificated.
- Avoid abrupt and excessive maneuvering that may exacerbate control difficulties.
- Do not engage the autopilot.
- If the autopilot is engaged, hold the control wheel firmly and disengage the autopilot.
- If an unusual roll response or uncommanded roll control movement is observed, reduce the angle-of-attack.
- Do not extend flaps during extended operation in icing conditions. Operation with flaps extended can result in a reduced wing angle-of-attack, with the possibility of ice forming on the upper surface further aft on the wing than normal, possibly aft of the protected area.
- If the flaps are extended, do not retract them until the airframe is clear of ice.
- Report these weather conditions to Air Traffic Control."

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM-113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Operations Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM-113.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM-113.

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to

a location where the requirements of this AD can be accomplished.

(d) This amendment becomes effective on June 11, 1996.

Issued in Renton, Washington, on April 24, 1996.

Ronald T. Wojnar,

*Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 96-10770 Filed 5-1-96; 3:28 pm]

**BILLING CODE 4910-13-P**

**14 CFR Part 39**

**[Docket No. 96-NM-20-AD; Amendment 39-9601; AD 96-09-25]**

**RIN 2120-AA64**

**Airworthiness Directives; de Havilland Model DHC-7 and DHC-8 Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to all de Havilland Model DHC-7 and DHC-8 series airplanes, that requires revising the Airplane Flight Manual (AFM) to provide the flight crew with recognition cues for, and procedures for exiting from, severe icing conditions, and to limit or prohibit the use of various flight control devices. This amendment is prompted by results of a review of the requirements for certification of the airplane in icing conditions, new information on the icing environment, and icing data provided currently to the flight crews. The actions specified by this AD are intended to minimize the potential hazards associated with operating the airplane in severe icing conditions by providing more clearly defined procedures and limitations associated with such conditions.

**EFFECTIVE DATE:** June 11, 1996.

**ADDRESSES:** Information pertaining to this rulemaking action may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** Danko Kramar, Aerospace Engineer, Systems and Flight Test Branch, ANE-172, FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256-7509; fax (516) 568-2716.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to

include an airworthiness directive (AD) that is applicable to all de Havilland Model DHC-7 and DHC-8 series airplanes was published in the Federal Register on January 25, 1996 (61 FR 2154). That action proposed to require revising the Airplane Flight Manual (AFM) to specify procedures that would prohibit flight in freezing rain or freezing drizzle conditions (as determined by certain visual cues), limit or prohibit the use of various flight control devices, and provide the flight crew with recognition cues for, and procedures for exiting from, severe icing conditions.

**Disposition of Comments**

For the disposition of comments on this rulemaking action, see Docket No. 95-NM-146-AD; Amendment 39-9604; AD 96-09-28, Airworthiness Directives; Aerospatiale Model ATR-42 and ATR-72 Series Airplanes, published elsewhere in this issue of the Federal Register.

**Conclusion**

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

**Cost Impact**

The FAA estimates that 183 airplanes of U.S. registry will be affected by this AD, that it will take approximately 1 work hour per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$10,980, or \$60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

In addition, the FAA recognizes that this AD may impose operational costs. However, those costs are incalculable because the frequency of occurrence of the specified conditions and the associated additional flight time are indeterminable. Nevertheless, because of the severity of the unsafe condition addressed, the FAA has determined that continued operational safety necessitates the imposition of these costs.