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FAA-04-18582-5

Revised October 16, 2000

Aircraft Certification Service

'SHORT' WORKSHEET 2003-NM-35-AD

DEPT. OF TRANSPORTATION
DOCKETS

2003 JUL 15 P 1:43

RECEIVED

DOCKET NUMBER:
TECH WRITER:

JAN 29 2003

FCAA AD No./Revision/Date (Attach 1 copy):

CTA AD 2001-12-03R1, dated February 4, 2002.

ANM-114

Manufacturer Service Information/Revision/Date (Attach 2 clean copies):

Embraer Service Bulletin 145-57-0034/ No Change or Change 1/ respectively dated October 11, 2001, and January 9, 2002.

PROPOSED CORRESPONDING ACTION:

Emergency AD

Immediately Adopted AD

Notice of Proposed Rulemaking

Final rule after NPRM
(If FRAN, complete Attachment A.)

Other (NFR, DFR)

Is this action one of the following?

Supersedure of AD (Docket No. _____)

Revision of AD (Docket No. _____)

Supplemental NPRM (Docket No. _____)
(If any of the above is checked, complete Attachment B.)

Project Engineer Name/Title: Bob Breneman/Program Manager

Branch: ANM-116 Telephone: 425-227-1263

Backup engineer: Rany Azzi Telephone: 770-703-6083

For each AD item numbered below, provide draft text and/or FCAA AD or SB references. WHERE POSSIBLE, answer items using markup of FCAA AD or SB, & mark with the AD item number.

1. Model, Applicability, # Airplanes (both U.S. & worldwide) - Refer to FCAA AD or SB; state any differences for the U.S. AD:

EMB-135 and EMB-145/ sn 145479 thru 145527, 145529 thru 145548, 145550, 145552 thru 145554, 145556 and 145557;
75 aircraft worldwide,
60 acft in US.

AD Summary and Discussion Sections:

2. What has the FCAA/mfgr told the FAA? "The FCAA advises that ..."
Describe background/events that prompted the AD in 1-2 sentences. Refer to FCAA AD or SB 'Reason.'

The CTA advises that the wing trunnion fittings have been manufactured with web fillet radius smaller than the minimum required by design data and can result in premature structural fatigue failure.

3a. What is the unsafe condition AND its cause? "These actions are intended to prevent..."
Describe unsafe condition and its cause in 2-3 sentences (non-technical terms). Refer to FCAA AD or SB 'Reason.'

These actions are intended to prevent premature fatigue failure of wing trunnion fittings and/or adjacent structures such as the spar, ribs, etc.

3b. What is the end-level effect on the airplane? "...which could result in..."
Provide a 1-sentence description; use non-technical terms.

Failure of these components could result in failure of the Main Landing Gear with subsequent damage to wing and loss of control of airplane upon landing.

4. (Yes or No) Is the corrective action required in this AD considered to be interim action?

No

5. (Yes or No) Is this action considered 'sensitive, or is it related to a Safety Recommendation? (If yes, state why sensitive, and/or provide copy of FAA/NSTB Safety Recommendation.)

No.

6. AD Differences or Exceptions to Policy (if needed): *"This AD differs from the FCAA AD..."*

Check if: Flight with Cracks (exception to policy)___; No Flight with Cracks___; Mandate Term Action ___; Not Mandating Term Action (exception to policy)___; Contact Mgr, FAA___; Compliance time ___; Mandate AFM Action___; Contact Mgr or FCAA___
Describe any other differences between service bulletin (or exceptions to policy) and this proposed FAA AD.

The Service Bulletin instructs to contact Embraer for technical disposition if any cracks are detected in the trunnion fitting after rework. This AD will require the replacement of the trunnion fitting if any cracks are detected.

AD Cost Impact Section:

7a. Work hours for corrective action(s) required: (List hours or reference SB 'Manpower').

Refer to section 1E of SB

7b. Parts Cost, if any: (List costs or reference SB 'Material - Cost and Availability').

Refer to section 2 of SB

AD Body Section:

For EACH corrective action, mark up FCAA AD or SB, if usable -OR- fill out Corrective Action Table below.

8a: Action # 1

What is the corrective action? Refer to "Compliance" section of CTA AD 2001-12-03R1
What is its compliance time? Refer to "Compliance" section of CTA AD 2001-12-03R1
(Add grace period if not available)
What is repetitive interval?

8b: Action # 2

What is the corrective action? Replace any trunnion fitting found with cracks either before or following rework
What is its compliance time? Prior to further flight
(Add grace period if not available)
What is repetitive interval? N/A

9. (Yes or No) Should corrective action(s) required in this AD to be applied to spares as well?

No

10. Should a ferry flight permit be: Permitted Permitted with limitations* Prohibited

**List limitations.*

11. Check the category that best describes the cause of the unsafe condition addressed by this AD:

Design Problem

Unapproved Parts

Operational

Maintenance

Quality Control Problem**

Other (specify):

**Reporting Req't Needed?