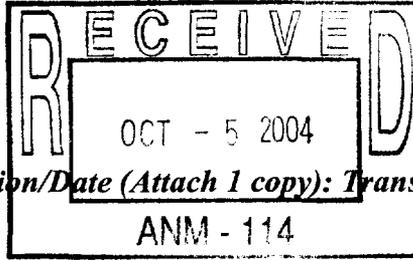


Aircraft Certification Service

'SHORT' WORKSHEET



FAA-04-19229-5

DOCKET NUMBER: 2004-NM-195-AD
TECH WRITER:

FCAA AD No./Revision/Date (Attach 1 copy): Transport Canada AD CF-2004-18, dated September 16, 2004.

Manufacturer Service Information/Revision/Date (Attach 2 clean copies): A601R-32-099, dated September 15, 2004.

PROPOSED CORRESPONDING ACTION:

- | | |
|--|--|
| <input type="checkbox"/> Emergency AD | <i>Is this action one of the following?</i> |
| <input checked="" type="checkbox"/> Immediately Adopted AD | <input type="checkbox"/> Supersedure of AD (Docket No. _____) |
| <input type="checkbox"/> Notice of Proposed Rulemaking | <input type="checkbox"/> Revision of AD (Docket No. _____) |
| <input type="checkbox"/> Final rule after NPRM
<i>(If FRAN, complete Attachment A.)</i> | <input type="checkbox"/> Supplemental NPRM (Docket No. _____)
<i>(If any of the above is checked, complete Attachment B.)</i> |
| <input type="checkbox"/> Other (NFR, DFR) | |

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:

Bombardier CL-600-2B19 "Regional Jet" series airplanes, certified in any category, and equipped with Main Landing Gear (MLG) main fittings, P/N 601R85001-3, and -4, and corresponding Messier Dowty P/N 17064-101, -102, -103, -104.

Number of US registered aircraft: 292 201
Number of aircraft worldwide: 291 292

per engr 9/20/04

Usage of the CRJ 100: 5 to 7 landings per day.

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.'

Transport Canada informed the FAA that there has been a report of cracking of the MLG main fitting at the section between the forward face of the main fitting at the trunnion side, and the area just above the shock strut upper attachment lug radius.

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.'

The crack initiated from a large corrosion pit located on the chamfer of the inner bore of the Pintle Pin Socket of the MLG main fitting. The actions are intended to prevent failure of the Main Landing Gear main fitting.

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 the main landing gear main fitting could result in collapse of the MLG upon landing.

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

Yes.

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.

Yes. For the sealant inspection of the MLG, the TCCA AD specified that, if there is sealant damage or indication of corrosion, the visual inspection of the main fitting lateral surface must be done within 5 days, and the ultrasonic inspection of the main fittings within 500 flight cycles, and thereafter at intervals not to exceed 5 days and 500 flight cycles respectively. However the Bombardier Service Bulletin specified to only do and repeat the ultrasonic inspection of the main fittings at 500 flight cycles only. This AD will require repeating the visual inspection of the main fitting lateral surface within 5 days following the visual inspection of the sealant, and every 5 days thereafter.

AD Cost Impact Section:

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

To do the visual inspections: 1 hour.

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

See the "Material -Cost and Availability" of the applicable service bulletins.

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: Detailed Visual Inspection of the Lateral Surface of the MLG Main Fittings	
What is the corrective action?	Perform a detailed visual inspection to detect cracking at the section between the forward face of the main fitting at the trunnion side and the area just above the shock strut upper attachment lug radius, in accordance with Part A of the Accomplishment Instructions of Bombardier Alert Service Bulletin A601R32-099, dated September 15, 2004. Replace any cracked MLG main fitting, prior to further flight, with a new or serviceable MLG main fitting.
What is its compliance time? (Add grace period if not available)	For each main fitting, upon the accumulation of 8000 flight cycles since new, or 8000 flight cycles since the last overhaul of the main landing gear, or within 50 flight cycles after the effective date of the AD, whichever occurs later.
What is repetitive interval?	Subsequently, at intervals not to exceed 5 days elapsed time, repeat the inspection detailed above. As an option, the repetitive visual inspection of the lateral surface of the main fittings can be discontinued if an ultrasonic inspection of the main fittings is done in accordance with Part C of the Accomplishment Instructions of Bombardier Alert Service Bulletin A601R-32-099, dated September 15, 2004.

8b: Action # 2: Detailed Visual Inspection of the Main Fittings Forward Bushing Sealant.

What is the corrective action?

Perform a detailed visual inspection for sealant damage, in accordance with Part B of the Accomplishment Instructions of Bombardier Alert Service Bulletin A601R-32-099, dated September 15, 2004.

If any of the following sealant damage is detected by the detailed inspection, such as:

- (a) Sealant missing;
- (b) Sealant partially or completely disbonded from the main landing gear forward face or from the bushing face;
- (c) Sealant cracked;
- (d) Presence of corrosion around the bushing.

1. Perform a detailed visual inspection of the lateral face for cracking, as specified in action 1 above; and
2. Perform an ultrasonic inspection of the Main Fittings as specified in action 3 below.

***What is its compliance time?
(Add grace period if not available)***

For the primary action of section 8b above: For each main fitting, upon the accumulation of 8000 flight cycles since new, or 8000 flight cycles since the last overhaul of the main landing gear, or within 500 flight cycles after the effective date of the AD, whichever occurs later.

For the secondary action of:

- Section 8b(1): within 5 days elapsed time following the sealant inspection;
- Section 8b(2): within 500 flight cycles following the sealant inspection.

What is repetitive interval?

For the primary action of section 8b above:

- Subsequently, at intervals not to exceed 500 flight cycles, repeat the inspection detailed above.

For the secondary action of:

- Section 8b(1): repeat at every 5 days elapsed time thereafter;
- Section 8b(2): repeat at every 500 flight cycles thereafter.

As an option, the repetitive visual inspection for sealant damage and the repetitive visual inspection of the lateral face for cracking can be discontinued if an ultrasonic inspection of the main fittings is done per section 8c, action # 3 below.

8c: Action # 3: Ultrasonic Inspection of the Main Fittings.

What is the corrective action?

Perform an ultrasonic inspection of the main fittings, in accordance with Part C of the Accomplishment Instructions of Bombardier Service Bulletin A601R-32-099, dated September 15, 2004.

***What is its compliance time?
(Add grace period if not available)***

For each main fitting, upon the accumulation of 8000 flight cycles since new, or 8000 flight cycles since the last overhaul of the main landing gear, or within 500 flight cycles after the effective date of the AD, whichever occurs later.

What is repetitive interval?

Repeat at every 5000 flight cycles thereafter or as dictated by section 8(b) above.

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

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?

12. (Yes or No) Was the lead airline process used in developing the requirements of this action?