	AIRWORTHINESS DIRECTIVE No F-2004-164	Distribution: B	Issue date: October 13, 2004	Page : 1/2
	Direction générale de l'aviation civile France GSAC publication	This Airworthiness Directive is published by the DGAC on behalf of EASA, Airworthiness Authority of the State of Design for the affected product, part or appliance.		<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>
No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive, unless otherwise agreed with the Authority of the State of Registry.				
Corresponding foreign Airworthiness Directive(s): Not applicable		Airworthiness Directive(s) replaced: F-2004-061 cancelled by its Revision 1		
Person in charge of airworthiness: ATR		Type(s): ATR 72 aircraft		
Type certificate(s) No. 176 TCDS No 176				
ATA chapter: 32	Subject: Landing gear – Main Landing Gear – Side Brace Assembly – Secondary side brace upper arm			

1. **EFFECTIVITY:**

ATR 72-101, -102, -201, -202, -211, -212, -212A aircraft models, all serial numbers, except those on which ATR modification No 5522 (ATR Service Bulletin (SB) ATR 72-32-1046) has been embodied.

2. **REASONS:**

Two cases of MLG secondary side brace upper arm rupture have been reported on the ATR fleet. Initiation and development of cracks are the cause of these ruptures.

The Airworthiness Directive (AD) F-2004-061 was issued to prevent possible rupture of MLG secondary side brace upper arm, which could result in possible collapse of MLG during specific conditions at take-off or Landing and to a potential unsafe condition for aircraft and passengers.


This new AD:

- repeats the requirements of AD F-2004-061 but reduces first inspection threshold of the upper arm for overhauled MLG secondary side braces from 4,000 flight cycles (FC) to 800 FC,
- provides AD terminating action replacing MLG secondary side brace upper arm made of aluminium alloy by a steel one.

3. **MANDATORY ACTIONS AND COMPLIANCE TIMES:**

The following measures are rendered mandatory from the effective date of this AD.

- 3.1. Before accumulation, by the MLG secondary side brace, of 4,000 FC since manufacture or before 800 FC since last overhaul, or before accumulation of 200 FC (grace period) from the effective date of this AD, whichever occurs later, perform Eddy Current inspection on MLG secondary side brace upper arm in accordance with SB MESSIER-DOWTY 631-32-178.

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3.2. According to the results of the inspection required by paragraph 3.1.:

3.2.1. If the MLG secondary side brace upper arm is found cracked, replace it by an airworthy one.

3.2.2. If the MLG secondary side brace upper arm is not found cracked, repeat the Eddy Current inspection at intervals not exceeding 800 FC.

3.3. MLG secondary side brace upper arms installed in replacement of a defective one, are submitted to:

3.3.1. For a new manufactured aluminium made upper arm, perform a first Eddy Current inspection at 4,000 FC and, according to the inspection results, replace the MLG secondary side brace upper arm or repeat the Eddy Current inspection at intervals not exceeding 800 FC.

3.3.2. For stored or already used aluminium made upper arm, perform an Eddy Current inspection before installation of the part on the aircraft and, according to the inspection results, replace the MLG secondary side brace upper arm or repeat the Eddy Current inspection at intervals not exceeding 800 FC.

3.4. At the first opportunity, or at the latest at 15,000 FC (18,000 FC for MLG secondary side braces incorporating SB MESSIER-DOWTY 631-32-085) or 8 years, since manufacture or since the last overhaul, whichever occurs first, replace the side brace assembly fitted with aluminium upper arm by side brace assembly fitted with steel upper arm according to the instructions of ATR Service Bulletin No 72-32-1046.

Action described at § 3.4. constitutes the terminating action of this AD, and cancels inspections as per § 3.1, 3.2 and 3.3.

4. REFERENCE PUBLICATIONS:

MESSIER-DOWTY Service Bulletin No 631-32-178.
 MESSIER-DOWTY Service Bulletin No 631-32-085.
 ATR Service Bulletin No ATR 72-32-1046 (MESSIER-DOWTY Service Bulletin No 631-32-183)
 Any further approved revision of these SBs is acceptable.

5. EFFECTIVE DATE:

October 23, 2004.

6. REMARK:

For questions concerning the technical contents of this AD's requirements, contact:

ATR - Yves OTTOGALI - Fax: 33 5 62 21 67 18.

7. APPROVAL:

This AD is approved under EASA reference No 2004-10119 dated October 05, 2004.