

AIRWORTHINESS DIRECTIVE

released by DIRECTION GENERALE DE L'AVIATION CIVILE

Inspection and/or modifications described below are mandatory. No person may operate a product to which this Airworthiness Directive applies except in accordance with the requirements of this Airworthiness Directive.

Translation of 'Consigne de Navigabilité' ref. : 2001-550-086(B)
In case of any difficulty, reference should be made to the French original issue.

ATR

ATR 42 aircraft

Main Landing Gear - Swinging lever spacer (ATA 32)

1. APPLICABILITY:

This Airworthiness Directive (AD) applies to main landing gears installed on ATR 42-200, -300, -320, -400, and -500 aircraft models on which ATR modification 5338 (or Service Bulletin (SB) ATR 42-32-0094) has not been embodied.

2. REASONS:

Several cases of fatigue cracks have been evidenced on main landing gear (MLG) swinging lever spacer. These fatigue cracks, located at the intersection base of the spacer, are due to a stress concentration induced by a transfer of some loads, by friction, from the swinging lever to the spacer through the swinging lever/barrel hinge pin.

The propagation of one of these cracks could result in the failure of the spacer base and potentially affect, during some operating phases, the symmetrical functioning of the braking system. This asymmetrical braking could result, in case of strong crosswind at landing, in reduced aircraft controllability.

The results of the investigations and of the metallurgical analysis have shown that the cracks length remains limited ; in addition no case of spacer fatigue failure has never been reported.

This AD is issued in order to prevent a fatigue failure of the MLG swinging lever spacer.

3. ACTIONS:

The following measures are rendered mandatory on the effective date of this AD:

Replace the MLG swinging lever spacer by a modified spacer in accordance with SB ATR 42-32-0094, before reaching the following limits, since new or since its last overhaul:

- 8 years or 15,000 landings, whichever occurs first, for ATR 42-200, -300, and -320.
- 9 years or 18,000 landings, whichever occurs first, for ATR 42-400 and -500.

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Note: It is recommended to embody SB ATR 42-32-0094 at the next MLG overhaul.

REF.: Service Bulletin ATR 42-32-0094
Any later approved revision of this SB is acceptable.

EFFECTIVE DATE : JANUARY 01, 2002

SUPERSEDED