

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. : 2001-086(B) R2
In case of any difficulty, reference should be made to the French original issue.

AIRBUS INDUSTRIE

A310 and A300-600 aircraft

A310 and A300-600 aircraft equipped with PW 4000 engines - Performance data (ATA 72)

APPLICABILITY:

AIRBUS INDUSTRIE A310 and A300-600 aircraft, models A310-324, A310-325, A300 B4-622 and A300 B4-622R (equipped with Pratt & Whitney engines PW 4000), all serial numbers, except for aircraft fitted with current production FB2C fan blades (Phase 3) on both engines.

Note: Aircraft on which AIRBUS INDUSTRIE modification No. 10925 has been embodied are equipped with phase 3 engines, and are not subject to the requirements of this Airworthiness Directive (AD).

REASONS:

Some engines of the PW 4000 series fitted with the early production standards of fan blades (Phase 0/1 - FB2B or FB2T) do not produce the level of thrust indicated in the Flight Manual (AFM).

This thrust shortfall, due to the erosion of the fan blade leading edge, results in acceleration and climb performance lower than those specified in the AFM.

Revision 1 of this AD introduced Pratt & Whitney Service Bulletin PW4ENG 72-731 as an Alternative means of Compliance (AMOC) in paragraph "Actions".

Revision 2 of this AD introduces complete set of certified performance computed with a thrust model taking into account the thrust shortfall. This set of performance replaces the initial simplified and conservative set of adjusted performance based on the "equivalent temperature" method.

ACTIONS:

The following actions are rendered mandatory.

Perform either action 1 or action 2:

Either :

1. Account for performance adjustments by performing action 1.a. and then action 1.b. as follows:

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1.a. From the effective date of this AD at original issue, unless already accomplished, introduce the following Temporary Revisions into the A310 and A300-600 Flight Manuals (as applicable to the operator's fleet):

- A310 Flight Manual Temporary Revision 5.03.00/01
- A310 Flight Manual Temporary Revision 5.03.00/02
- A300-600 Flight Manual Temporary Revision 5.03.00/01

which incorporate the necessary performance adjustments.

1.b. Within 30 days following the effective date of this AD at revision 2:

- remove the following Temporary Revisions from the A310 and A300-600 Flight Manuals:
 - A310 Flight Manual Temporary Revision 5.03.00/01
 - A310 Flight Manual Temporary Revision 5.03.00/02
 - A300-600 Flight Manual Temporary Revision 5.03.00/01

and

- introduce the following Temporary Revisions into the A310 and A300-600 Flight Manuals (as applicable to the operator's fleet):
 - A310 Flight Manual Temporary Revision 5.03.00/03
 - A310 Flight Manual Temporary Revision 5.03.00/04
 - A310 Flight Manual Temporary Revision 5.03.00/05
 - A310 Flight Manual Temporary Revision 5.03.00/06
 - A310 Flight Manual Temporary Revision 5.03.00/07
 - A300-600 Flight Manual Temporary Revision 5.03.00/02.

or

2. Perform a restoration of the leading edge contour of fan blades within 450 engine cycles from the effective date of this AD at original issue and then every 450 engine cycles in accordance with one of the procedures and with the instructions of Pratt & Whitney Service Bulletin PW4ENG 72-731, with the following constraints:

- The operator must put in place a means to record cycle numbers for individual blades. If a fan rotor is assembled with blades that have mixed cycles, the rotor set assumes the highest number of cycles of any blade in the rotor.
- Additionally, if Pratt & Whitney Service Bulletin PW4ENG 72-732 is used to restore the leading edge contour of fan blades:
 - Initial heavy erosion removal using the motorized tool shall be accomplished by a Pratt & Whitney special team. Use of the motorized tool either on wing or off wing is restricted to a Pratt & Whitney team.
 - Further hand tool scrape procedure can only be done by operators who have been trained by a Pratt & Whitney team.

Note: Knowing that this AD is not applicable to aircraft fitted with FB2C (Phase 3) fan blades on both engines, the operators of these aircraft, who have already introduced the above-mentioned AFM Temporary Revisions (T.R.), can remove these.

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- REF.:
- A310 Flight Manual Temporary Revision 5.03.00/01
 - A310 Flight Manual Temporary Revision 5.03.00/02
 - A310 Flight Manual Temporary Revision 5.03.00/03
 - A310 Flight Manual Temporary Revision 5.03.00/04
 - A310 Flight Manual Temporary Revision 5.03.00/05
 - A310 Flight Manual Temporary Revision 5.03.00/06
 - A310 Flight Manual Temporary Revision 5.03.00/07
 - A300-600 Flight Manual Temporary Revision 5.03.00/01
 - A300-600 Flight Manual Temporary Revision 5.03.00/02
 - Pratt & Whitney Service Bulletins :
 - PW4ENG 72-731
 - PW4ENG 72-732
- (All Any later approved revision of these SBs is acceptable)

This Revision 2 replaces AD 2001-086(B) Revision 1 dated June 27, 2001.

EFFECTIVE DATES :

Original AD : MARCH 31, 2001
Revision 1 : JULY 07, 2001
Revision 2 : SEPTEMBER 15, 2001