

AIRWORTHINESS DIRECTIVE

released by Direction Générale de l'Aviation Civile

Inspections 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"
Réf. : 81-094-018(B) R2
In case of any difficulty, reference should
be made to the French original issue.

AEROSPATIALE Helicopters AS 350 all models (ASTAR and ECUREUIL)

Main gear box

Bevel reduction gear modules P/N 350A.32.0300.00 and .01

Following a case of loss of drive between bevel reduction gear and epicyclic reduction gear of the main gear box due to excessive wear on splines of vertical shaft, it has been decided - in order to detect this wear - to make the following measures mandatory :

- A - A periodic spectrometric analysis of the main gear box oil shall be performed in accordance with AEROSPATIALE S.B. AS 350 n° 05.06 Rev. 2.

This analysis shall be made :

- on receipt of the present directive, except if already accomplished, for bevel reduction gear modules having accumulated over 300 hours of operation,
- then at a periodicity of 300 hours.

From the date of sampling and pending the results of the analysis, the use of the bevel reduction gear module shall be limited to 100 hours.

- B - If the iron contents is higher than 80 PPM, remove the rotor mast and the sun gear and check the wear on splines of the vertical shaft in accordance with the procedure detailed in AEROSPATIALE S.B. AS 350 n° 05.06 Rev. 2.

The bevel reduction gear module shall not be reinstalled if the wear value found is :

- greater than 0,5 mm for an operating time less than 500 hours, or
- greater than 1 mm for an operating time greater than 500 hours.

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July 20, 1988

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all models (ASTAR and ECUREUIL)**

Ref. : 81-094-018(B) R2

C - The mandatory monitoring by means of spectrometric oil analysis as defined by this Airworthiness Directive does not apply to :

- 1 - bevel reduction gear module P/N 350.A.32.0300.02 equipped from origine with a nitrided vertical shaft.
- 2 - Bevel reduction gear modules P/N 350.A.32.0300.00 or .01 having undergone either modification AMS 07.7042 (nitriding of splines on retrofit action) or AMS 07.7027 (nitrided vertical shaft).

Refer to the equipment Log Card.

Ref. : AEROSPATIALE S.B. AS 350 n° 05.06 Rev. 2

The present revision 2 supersedes AD 81-094-018(B)R1
dated December 23rd, 1987

EFFECTIVE DATE : MAY 20 TH, 1981

(Same as original A.D.)