

Agusta A109 Series Helicopters

AD/A109/16
Amdt 3

Main Rotor Blades

12/90
DM

Applicability: All models fitted with main rotor blades P/N 109-0103-01-() (all dash numbers), serial numbers 378 through to 1519 inclusive, which have achieved 300 or more hours component time in service.

Requirement: Action in accordance with Agusta Bollettino Tecnico No 109-79, dated 27 July 1990. The radiographic inspection should be performed using X-rays of energy no greater than 50 KVP to obtain the required contrast sensitivity, in the area of interest, of no greater than 1%.

Note 1: This Bollettino Tecnico supersedes B T No 109-6, Revs A and B. Eddy current inspections performed in accordance with previous issues of this AD (B T No 109-6) shall be accepted as meeting the eddy current inspection requirement of this amendment.

Note 2: Approval to perform the radiographic inspection in accordance with Part 2 of the Requirement document and Agusta Report No 109-02-79, issued 15 July 1990, may be granted upon application to the Authority. Applicants will need access to suitable radiographic equipment and must be able to demonstrate 1% or better contrast sensitivity on a representative specimen.

Compliance: For Part 1 of the Requirement document: At intervals not to exceed 25 hours time in service and before further flight upon the occurrence of anomalous vibratory conditions, until such time as Part 2 of the Requirement Document has been accomplished.

For Part 2 of the Requirement document: At operator's option.

Background: Several cases of main rotor blade cracking have been found in service, including one which failed catastrophically. Fatigue cracking has been initiated by chordwise scoring, introduced during manufacture, adjacent to spar mass balance weights.

Amendment 2 reduced the initial inspection threshold to 600 hours.

Amendment 3 further reduces the initial inspection threshold to 300 hours, in accordance with the manufacturer's recommendations, and also introduces a once only inspection procedure to positively identify blades which have unacceptable levels of scoring. Such blades must be removed from service before further flight. Any positive indications, whether confirmed or otherwise, resulting from these inspections, should be the subject of a Major Defect Report.