

AS332L2, G-PUMM

AAIB Bulletin No: 8/99 Ref: EW/G99/02/11 Category: 2.1

Aircraft Type and Registration: AS332L2, G-PUMM

No & Type of Engines: 2 Turbomeca Makila 1A2 turboshaft engines

Year of Manufacture: 1998

Date & Time (UTC): 22 February 1999 at 1300 hrs

Location: Peterhead, 20 nm north-east of Aberdeen, Scotland

Type of Flight: Public Transport (Passenger)

Persons on Board: Crew - 2 - Passengers - 17

Injuries: Crew - None - Passengers - None

Nature of Damage: Main rotor head, blades and transmission damaged

Commander's Licence: Airline Transport Pilot's Licence (Helicopters)

Commander's Age: 40 years

Commander's Flying Experience: 6,400 hours (of which 5,150 were on type)
Last 90 days - 130 hours
Last 28 days - 50 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The helicopter was on a routine charter flight taking oil company personnel from Aberdeen Airport to the Glomar field. It had been cruising at a height of 3,000 feet when, after the initial part of the flight which had been in visual meteorological conditions (VMC), the helicopter entered a snow shower as it passed over Peterhead. The snow shower was not heavy and the pilot reported that they had been flying in and out of the cloud, with no concern that they were at risk of being struck by lightning, when the helicopter suddenly suffered a strike. Although the helicopter was 'jolted' by the strike, it appeared to continue to handle normally. Clearance was requested from ATC to descend offshore into good VMC for a return to Aberdeen. This was confirmed and the helicopter subsequently returned to land at Aberdeen Airport without further incident. During the return flight it was observed that only the global positioning system (GPS) navigation system had become unserviceable after the strike.

The helicopter was subjected to a lightning strike inspection after landing, in accordance with the appropriate section of the Aircraft Maintenance Manual. The associated visual inspection found that all four main rotor blades had suffered sufficient lightning strike damage for them to be rejected from service. In addition, the main rotor head was rejected on the advice of the

manufacturer and the main transmission gearbox was found to have high residual magnetism, for which it was also rejected. After replacement of these components the aircraft was returned to service.