No: 11/84 Ref: EW/G84/06/09

Aircraft type and registration: Agusta Bell 206B, G-AZRU (light single engine helicopter)

Year of Manufacture: 1972

Date and time (GMT):

19 June 1984 at 0705 hrs

Location:

Sutton-in-Ashfield, Nottinghamshire

Type of flight:

Crop Spraying

Persons on board:

Crew - 1

Passengers - Nil

injuries:

Crew - Nil

Passengers - N/A

Nature of damage:

Heavy landing damage to airframe, sudden stoppage damage to dynamic

components, tailcone detached by main blade impact

Commander's Licence:

Commercial Pilot's Licence (New Zealand)

Commander's Age:

32 years

Commander's total flying

experience:

8145 hours (of which 560 were on type)

Information Source:

Accident Report form submitted by commander and engineer's report.

The aircraft was being used for crop spraying. At the start of the day's operations a pre-flight inspection was carried out which included fuel drain and filters checks. The aft fuel boost pump had been changed two days previously and it was noted by the pilot that pressure from the aft pump was lower than from the front pump,

The aircraft was refuelled during the operations but at the start of the accident flight the fuel gauge indication had reduced to 12-13 US gallons. From fuel consumption checks he had previously carried out (88-90 litres or approximately 23.5 US gallons per hour) the pilot considered that he had sufficient fuel for a 10 minute sortie.

The aircraft had completed the spraying operation and was returning to the loading site when the engine stopped. In the ensuing forced landing in a standing crop the main rotor severed the tail boom and the aircraft was severely damaged. No fuel pump warning light indication was seen during the flight.

A total of 22.5 1. (5.9 US gallons) of fuel was recovered from the aircraft. It is reported that an examination of the engine and aircraft failed to detect any significant defect or malfunction. On the Agusta Bell 206B Jetranger a "fuel low" warning light is illuminated when approximately 20 US gallons (76 litres) remain in the tank. The 206B Flight Manual remedial advice, if the caption illuminates, is to "Plan Landing". The Flight Manual gives an amount for unusable fuel of 1,03 gallons (4.0 litres) but does not relate this to a flight condition. The manual also contains a warning that with one or either of the fuel boost pumps inoperative the unusable fuel is 10 gallons (38 litres) due to possible sloshing in unusual attitudes or out of trim conditions.