Beech D55 Baron, G-MOSS

AAIB Bulletin No: 7/2000 Ref: EW/G2000/03/04 Category: 1.2

Aircraft Type and Registration: Beech D55 Baron, G-MOSS

No & Type of Engines: 2 Continental Motors Corp IO-520-C2B piston engines

Year of Manufacture: 1968

Date & Time (UTC): 7 March 2000 at 1223 hrs

Location: Elstree Aerodrome, Hertfordshire

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - None

Injuries: Crew - None - Passengers - N/A

Nature of Damage: Damage to right propeller, engine cowl, flap and aileron

Commander's Licence: UK and US Airline Transport Pilot's Licences

Commander's Age: 46 years

Commander's Flying

Experience:

6,500 hours (of which 750 were on type)

Last 90 days - 60 hours

Last 28 days - 20 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and

telephone inquiries by AAIB

The aircraft was being flown from Guernsey to Elstree to undergo preparation for renewal of its Certificate of Airworthiness. It is reported that the aircraft had spent a considerable amount of time parked at Guernsey prior to purchase by its new owner.

Upon arrival in the circuit at Elstree, as the pilot selected landing gear DOWN, he felt a 'thump' from beneath the front right seat and the landing gear indicator lights showed green only for the left main and nose gears and a red for the right main gear. A reselection failed to improve the situation and use of the emergency selector only achieved three red lights. The pilot returned to a normal DOWN selection and obtained the same two green and one red light indications. After two flypasts of the control tower, when the landing gear appeared to be down but could not be confirmed to be locked, he elected to land in this condition.

Touching down with the weight on the left and nose gears as far as possible, the pilot felt initially that the right main gear would support the aircraft but then suddenly felt it start to collapse. He immediately moved the mixture levers to CUT-OFF and feathered both propellers. The aircraft came to a halt with minimal damage and the pilot left the aircraft normally.

The maintenance company repairing the aircraft found that the right main landing gear up-lock roller had seized and, in releasing the up-lock, the gear actuating rod had bent. As the gear had neared the down position, the rod was therefore 'too short' to complete the cycle into down-lock. They report that, prior to its prolonged grounding at Guernsey most, if not all, of the bushes and joints in all three landing gears had been renewed (not by the aforementioned company) but appeared not to have been lubricated. As a result, many bushes and articulated joints had corroded in the intervening period, necessitating drifting out to remove them. After renewal of the affected items and replacement of the bent actuating rod, the mechanism worked normally.