

AAIB Bulletin No: 3/94

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Category: 1.2

Aircraft Type and Registration: Beech 95-B55 Baron, G-BNVZ

No & Type of Engines: 2 Continental IO-470-L piston engines

Year of Manufacture: 1977

Date & Time (UTC): 22 January 1994 at 1350 hrs

Location: Barton (Manchester) Airfield

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 2

Injuries: Crew - None Passengers - None

Nature of Damage: Right propeller destroyed and engine shock loaded, substantial damage to right wing, flap, tailplane and elevator

Commander's Licence: Private Pilot's Licence

Commander's Age: 39 years

Commander's Flying Experience: 1,100 hours (of which 264 were on type)
Last 90 days - 10 hours
Last 28 days - 3 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

Following a local flight the aircraft rejoined the circuit. When downwind to land on Runway 27, landing gear extension was selected and, whilst the gear was in transit, a 'thump' was heard to come from below the co-pilot's seat. The passenger reported that something seemed to have hit the underside of his seat. Green landing gear indications were obtained for the nose and left main gears, but the 'in transit' light remained illuminated.

The pilot informed the tower that he had a gear problem and departed the circuit. He cycled the landing gear several times, including once using the emergency procedure, but was unable to obtain improved indications. He flew the aircraft twice slowly past the tower and was informed that the right main gear appeared to be in the correct position.

The aircraft was subsequently landed. However, although the touchdown was normal, the right main gear collapsed after about 200 metres of the landing run, causing the right propeller and wingtip to strike the ground. The aircraft ground looped and came to rest on the edge of the runway.

Subsequent examination found that the main landing gear uplock spring (Pt No 35-815115) had become weak. This appeared to have resulted in the landing gear retract rod, which should normally only be subjected to tension loads, becoming buckled before the uplock was forced to disengage. The resultant effective foreshortening of this rod had prevented the gear achieving the fully locked down condition.

Year of Manufacturer:	1969
Date & Time (UTC):	5 February 1994 at 1725 hrs
Location:	Cairn Airfield, Gumbria
Type of Flight:	Aerial Work
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Damage beyond economic repair
Commander's Licence:	Basic Commercial Pilot's Licence with instrument and Night Ratings
Commander's Age:	23 years
Commander's Flying Experience:	2,127 (of which 777 were on type) Last 90 days - 12 hours Last 28 days - 7 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

At 1705 hrs the aircraft took off from Cairn Airfield with nine passengers and the pilot on board. The parachutists left the aircraft at about 6,500 feet and the pilot started the descent to land. A low level, left-hand circuit to Runway 24 was carried out; the surface wind was less than 5 kt from the south-west. It was twilight, however, the sky to the west was still bright from the setting sun and the runway was visible; there was no runway lighting. The pilot had selected the red cockpit lighting to full intensity and both landing lights were on.

At 50 feet on final approach the pilot had sufficient visual reference to continue the approach; the aircraft was aligned slightly to the right of the centreline, however, the pilot was able to correct this before touchdown. It was as the main wheels touched down that the pilot realised he no longer had adequate visual reference. Before he could take any corrective action the aircraft started to decelerate and contact was made with an obstruction on the left side. The nosewheel was still clear of the ground when the deceleration became rapid and the aircraft went through a fence, to the left of the runway, and came to rest against a pile of concrete rubble. The pilot who was wearing lap and diagonal restraints remained escaped without injury. Shortly afterwards, when he deemed it safe to do so, he returned to the aircraft to complete the shutdown drills.