AAIB Bulletin No: 11/93 Ref: EW/G93/08/24 Category: 1.3

Aircraft Type and Registration: Bolkow BO-209 Monsun, G-AYPE and Grant March 1981

No & Type of Engines: 1 Lycoming IO-320-D1B piston engine

Year of Manufacture: 1971

Date & Time (UTC): 21 August 1993 at 1058 hrs

Location: Biggin Hill Airport, Kent

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Damage to propeller, engine, cowling and nose landing

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Commander's Licence: Private Pilot's Licence with IMC Rating

Commander's Age: 67 years

Commander's Flying Experience: 496 hours (of which 157 were on type)

Last 90 days - 3 hours Last 28 days - 1 hour

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

AAIB inspection

The pilot reported that, following a visual approach to Runway 21, the aircraft touched down lightly on the main wheels as normal, and after travelling some distance along the runway the nosewheel retracted causing the propeller to strike the runway. The aircraft then skidded along the runway until coming to a stop in a nose down attitude. The pilot and passenger evacuated the aircraft without injury.

Examination of the aircraft showed that the nose landing gear had collapsed rearward when the drag brace assembly had collapsed. The drag brace consists of two struts forming an over-centre mechanism. The upper strut, which is an 'A' frame, had broken near its mid point. The strut was fabricated from welded steel tube and had failed on both sides, at the cross bar of the 'A' near to, but not in, the welds. The fractured surfaces were typical of bending failures in tube due to compressive overload. No evidence of fatigue was apparent.

The maintenance organisation reported that propeller marks were found on the runway, near the touch down area.