

Agusta Bell 47J-2 Ranger, G-ASLR, 31 January 1996

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Aircraft Type and Registration:Agusta Bell 47J-2 Ranger, G-ASLR

No & Type of Engines:1 Lycoming VO-540-B1B3 piston engine

Year of Manufacture:1963

Date & Time (UTC):31 January 1996 at 1520 hrs

Location:Bristol (Lulsgate) Airport, Avon

Type of Flight:Private

Persons on Board:Crew - 1 Passengers - None

Injuries:Crew - None Passengers - N/A

Nature of Damage: Tail rotor (T/R) blades broken; T/R gearboxmounting cracked; T/R drive shaft failed; skid cross tubes bent

Commander's Licence: Private Pilot's Licence

Commander's Age: 43 years

Commander's Flying Experience: 274 hours (of which 192were on type)

Last 90 days - 30 hours

Last 28 days - 6 hours

Information Source: Aircraft Accident Report Form submittedby the pilot

The surface wind was 8 kt from 050° andthe helicopter was in a four foot hover above the grass, pointingdirectly into wind. Before moving off, as the pilot turned thehelicopter to the right to check that the area was clear, it suddenlydescended and the collective lever which he applied did not preventit from bouncing off the ground and yawing to the left, back intothe hover. The helicopter was then vibrating severely, so thepilot lowered the lever slightly and it dropped heavily to theground again. The pilot shut down the engine and left the cockpitvia the normal door.

Examination of the helicopter showed that the tails of the skidshad made a shallow impression in the grass and that the tail rotorwas touching the ground.

The pilot states that he believes the accident to have been caused by a combination of being at a low hover height, having an aft centre of gravity and a crosswind from the left, together with applying the collective pitch lever too slowly or insufficiently, thereby not cushioning the landing.