AAIB Bulletin No: 12/95 Ref: EW/G95/10/07 Category: 2.3

Aircraft Type and Registration: Westland Bell 47G-3B-1, G-BGID

No & Type of Engines: 1 Lycoming TVO-435-B1A piston engine

Year of Manufacture: 1965

**Date & Time (UTC):** 10 October 1995 at 1040 hrs

Location: Manor Farm, Marston, Devizes, Wiltshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Right skid detached and forward cross tube bent;

flexible (rubber) engine mount torn

Commander's Licence: Private Pilot's Licence

Commander's Age: 56 years

Commander's Flying Experience: 570 hours (of which 233 were on type)

Last 90 days - 8 hours Last 28 days - 4 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

Having refuelled his helicopter at Gloucester the pilot was making a short flight to land in a field at Manor Farm. While transiting the Lyneham control zone he had been concerned by the presence of circuit traffic and had been obliged to descend from his cruising height in order to maintain separation and, some ten minutes later, whilst he was approaching the landing area, he was still a little unnerved by this event. The wind was 220°/5 to 7 kt and the visibility was good. Since he was unfamiliar with the landing area, the pilot made two circuits whilst choosing a suitable landing spot. He had noted the presence of some low level wires at the upwind end of his chosen field, and was making a fairly steep approach from about 700 feet, out of consideration for the occupants of two hamlets at the downwind end.

Commencing the approach at 50 kt the pilot partially closed the throttle, entered an autorotational descent and, with about 100 feet to go, began to flare, while reducing the rate of descent. At about 20 feet agl, his passenger called "Mind the wires" and the pilot, hurriedly scanning the area for wires which he might not have seen, failed to notice that the engine RPM and rotor RPM needles were still split. At six feet, with the helicopter in a level attitude and with zero forward speed, it continued to

settle and the pilot was obliged to apply full collective pitch lever to cushion the landing. The helicopter touched down about 20° left of its original heading and, because the field was furrowed, on the front of the right skid, leaving the left skid some four inches above the furrow. The subsequent movement of the helicopter damaged neither the main nor tail rotor but the skid landing gear was deformed and partially detached. Both occupants left the helicopter through the normal doors and, although the Police and Fire services attended the scene, no assistance was required.

In a thorough and comprehensive report, the pilot attributes the accident to the following factors:

His residual anxiety following the avoidance manoeuvre in the Lyncham MATZ.

His unfamiliarity with the landing site and its obstacles.

His practice of making an approach in autorotation instead of with power applied.

The distraction caused by his passenger's warning, which occurred at a vital time in the approach.

The uneven surface of the field, which had been obscured by long grass.

Uncorrected yaw occurring on touchdown.

Lack of recent flying practice, due to aircraft non-availability during maintenance.