

# Westland Scout AH1, G-BYNZ

**AAIB Bulletin No: 12/2000 Ref: EW/G2000/09/22 Category: 2.2**

**Aircraft Type and Registration:** Westland Scout AH1, G-BYNZ

**No & Type of Engines:** 1 Rolls-Royce Nimbus MK.10501 turboshaft engine

**Year of Manufacture:** 1969

**Date & Time (UTC):** 24 September 2000 at 1000 hrs

**Location:** In a field - 4m north north-east of Ludgershall, Wiltshire

**Type of Flight:** Private

**Persons on Board:** Crew - 1 - Passengers - 1 (ground handler)

**Injuries:** Crew - None - Passengers - None

**Nature of Damage:** Aircraft damaged beyond economic repair

**Commander's Licence:** Private Pilot's Licence

**Commander's Age:** 54 years

**Commander's Flying Experience:** 280 hours (of which 49 were on type)  
Last 90 days - 14 hours  
Last 28 days - 6 hours

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

The pilot, who was also the owner of the ex-Army helicopter, planned to fly home to Gloucestershire from Thruxton. The weather was forecast to be overcast clouds with light winds and generally good visibility but with conditions expected to deteriorate in occasional rainshowers.

The helicopter departed from Thruxton on a northerly track and was established in cruising flight at 1,200 feet. About five minutes after departure the visibility ahead deteriorated and a lowering cloudbase forced the pilot to descend to 800 feet. In view of the poor conditions and the proximity of high ground, the pilot decided to return to Thruxton and carried out a 180° turn. Not long after reversing course the conditions deteriorated further and the pilot therefore decided to carry out an emergency landing in a field directly below him.

To keep the field in sight, the pilot put the helicopter into a tight right-hand descending spiral and reduced the forward speed. As it approached the ground, still turning to the right and with low forward speed, the pilot applied collective pitch to reduce the rate of descent and left yaw pedal. However, with full left yaw pedal applied the pilot was unable to stop the yaw and, as he applied more collective lever for the landing, the over-torque warning sounded. With the helicopter still yawing to the right and descending slowly the tail struck the ground followed by the rear of the left

skid, which dug into the earth and caused the helicopter to roll on to its left side and the main rotors to strike the ground. After the helicopter came to rest, the pilot turned off the master switch, and he and the left seat occupant, who were both wearing five point harnesses, climbed out through the right front door.

In his report the pilot states his belief that the tail rotor stalled and prevented him from stopping the yaw to the right. The Low Speed Flight Envelope section of the Army Aircrew Manual for the Scout states:

"c. Landing. ....If an excessive amount of left pedal is being used during the final stages of any approach there is a danger of losing yaw control: in this event the collective lever should be lowered slightly, maintaining the left pedal position, and forward speed increased smoothly using left cyclic cautiously to aid directional control. Should the loss of yaw control be allowed to develop before recovery action is initiated a high rate of descent will follow and considerable over-torquing will be required to prevent the aircraft striking the ground."