

## Lancair 320, G-BTOR

**AAIB Bulletin No: 9/98 Ref: EW/G98/06/33      Category: 1.3**

**Aircraft Type and Registration:**      Lancair 320, G-BTOR

**No & Type of Engines:**                      1 Lycoming IO-320-B1A piston engine

**Year of Manufacture:**                        1993

**Date & Time (UTC):**                         19 June 1998 at 1704 hrs

**Location:**                                        Near Wherwell , Andover, Hants

**Type of Flight:**                                 Private

**Persons on Board:**                            Crew - 1 - Passengers - 1

**Injuries:**                                        Crew - Minor - Passengers - Minor

**Nature of Damage:**                         Damaged beyond economic repair

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

**Commander's Age:**                            63 years

**Commander's Flying Experience:**      1,138 hours (of which 133 were on type)

    Last 90 days - 6 hours

    Last 28 days - 4 hours

**Information Source:**                         Aircraft Accident Report Form submitted by the pilot and telephone enquiries by AAIB

The aircraft was refuelled to a total of 24.5 US gallons for a 50 minute return flight to Biggin Hill. At Biggin Hill the engine was reluctant to start when hot, but started and ran after a period of time with all power and magneto checks satisfactory. On departure from Biggin Hill with an estimated 18 US gallons, the aircraft climbed and levelled off at 2,000 feet and power was set to 2400 RPM/24 in Hg with a fuel flow of 9.2 US gallons/hour. After clearing with Farnborough Radar the pilot called Thruxton and reported that he was south of Andover and wished to rejoin the circuit. Just after the call there was a slight misfire and the engine ran down to idle. The mixture control was moved to rich and the transfer and electric booster pump turned on, the throttle was exercised and the engine picked up slightly and then returned to windmill or idle power. The aircraft was now at 1,400 feet and the pilot selected a field and lowered the landing gear; however, the field turned out to be barley and the gear was reselected up. The gear was partly up when the left wing struck the crop in what may have been a stalled attitude, the aircraft swung in nose down

and broke up. Although fuel was sprayed across the field no fire occurred, possibly because the engine had landed upside down, shielding the hot components. The pilot attributed the escape of both occupants with only minor injuries to their use of four point harness.

The subsequent strip of the engine and bay testing of the injector pump failed to reveal the cause of the failure. Fuel was present up to the injector, but the outgoing lines were dry. The pilot considers that a possible cause may have been the formation of a vapour lock in a line which had been recently lagged, and was located against the crankcase.