AAIB Bulletin No: 8/94 Ref: EW/G94/06/26 Category: 1.3

Aircraft Type and Registration: DH82A Tiger Moth, G-ADPC

No & Type of Engines: 1 De Havilland Gipsy Major 1 piston engine

Year of Manufacture: 1935

Date & Time (UTC): 24 June 1994 at 0934 hrs

Location: RNAS Yeovilton, Somerset

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Substantial to lower wings, landing gear, propeller and

engine nacelle

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 50 years

Commander's Flying Experience: 7,902 (of which 46 were on type)

Last 90 days - 50 hours Last 28 days - 38 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The weather conditions on the day of the accident were fine with good visibility and a temperature of 23°C. As the pilot arrived at the airfield to prepare for his short local flight he noticed the windsock near Runway 09 threshold indicating a surface wind of 180°. The windsock situated at the centre of the airfield indicated a surface wind of 160°. The wind reported by ATC was 135°/12 to 15 kt. The pilot elected to use the grass strip orientated 210° for departure, rather than the preferred grass strip 09/27. The combined weight of the pilot and passenger was 364 lb and with 16 gallons of fuel on board the pilot estimated that the aircraft was well below its maximum AUW.

The aircraft taxied for takeoff and was given the surface wind as 130°/12 to 15 kt. The windsock situated just north of the intended take-off point however showed a more southerly direction. With 2,000 RPM selected the aircraft accelerated normally to 30 kt whereupon the pilot raised the tail in the normal manner. At this point the left wing lifted but was levelled with the use of aileron. As the aircraft reached 38 kt it ceased to accelerate further and tended to move to the right. The pilot attempted to ease the aircraft off the ground as there was insufficient runway remaining within which to carry out a successful abort. The aircraft only climbed a few feet and, even though the nose was lowered, the

speed remained stable at 40 kt. As the aircraft reached the end of the strip the right mainwheel struck a marker board. Still only just airborne the pilot turned slightly to the right to overfly lower ground and raised the nose to clear the airfield boundary fence. This caused the speed to decay and the aircraft to sink. Realising that the situation was irretrievable the pilot closed the throttle just before hitting a farm fence. The impact was soft and neither occupant suffered any injury.

The pilot reported that at the start of the take-off run the crosswind was well within limits but as the aircraft proceeded along the strip it may have been affected by an increasing tailwind component.