No: 6/85 **Ref: EW/C915/01**

Aircraft type and registration:	Cessna 172L PH-KDK (light single engined fixed wing aircraft)
Year of Manufacture:	1978
Date and time (GMT):	27 April 1985 at approximately 1644 hrs
Location:	1 mile north-west of Streatley, nr Dunstable, Bedfordshire
Type of flight:	Air charter
Persons on board:	Crew — 1 Passengers — 3
Injuries:	Crew — 1 (fatal) Passengers — 3 (fatal)
Nature of damage:	Aircraft destroyed by impact and fire
Commander's Licence:	Netherlands Commercial Pilot's Licence without instrument rating, valid for single-engined aircraft only.
Commander's Age:	39 years
Commander's total flying experience:	Approximately 600 hours
Information Source:	AIB Field Investigation.

On the day of the accident eastern England was affected by frequent showers of rain, snow and occasionally hail, which extended over Cambridgeshire and Bedfordshire during the late afternoon. The forecast weather for the Luton area gave the lowest cloud as 1500 feet in showers, visibility 3000 metres and a risk of isolated Cumulo Nimbus base 800 feet and hill fog.

The aircraft left Texel with full fuel tanks at 1035 hrs and flew to Southend, where it was refuelled again to full tanks with 83 litres of AVGAS. It then continued to Duxford, where it landed at 1333 hrs.

At approximately 1530 hrs it began to snow heavily at Duxford. At about 1615 hrs, during a temporary break in the snow showers, the pilot decided to continue his journey. Accordingly, at 1626 hrs he took off to fly to Old Warden, some 16 miles to the west. He established radio contact with Luton at 1635 hrs, reporting that he was on a VFR flight plan from Duxford to Biggleswade, that he was midway at 700 feet in snow and would like radar vectors for Old Warden. Luton air traffic control advised him that they were unable to see him on radar at that altitude and asked if he could climb. One minute later the pilot reported that he was climbing in snow but was encountering the freezing level at 1000 feet. The Luton controller advised him that he was still unable to assist. At 1638 hrs the controller called the pilot again to say that he still had no radar contact and asked him his height. The pilot replied that he was "NOT HIGHER THAN FIVE ZERO ZERO". At this time the cloud ceiling Luton was 500 feet, the runway visual range was 1500 metres and the local QNH was 1008. There then followed a short period during which the controller dealt with 7 other aircraft before he was able to call PH-KDK again. This next contact was at 1640 hrs when, in response to a question from the controller, the pilot reported that he was at 600 feet. The controller advised him that he was still not visible on radar but the VDF showed him to be passing north of Luton airport. (In this area terrain height varies up to 565 feet and the sector safe height for flight in IMC is 2100 feet.) One minute later the controller asked the pilot to confirm that he had visual contact with the ground and the pilot replied that he was "VISUAL".

The controller then dealt with 3 more aircraft, one of which was a southbound light aircraft approaching the Cranfield VOR at 2300 feet, and thus approaching the same general area as PH-KDK. Accordingly, to resolve any possible conflict, the controller asked the pilot of PH-KDK to transmit for DF. The pilot complied, advising that he was orbitting at that time and was climbing slowly. The controller determined the magnetic bearing of the aircraft to be 332° and advised the pilot to exercise caution as there was a southbound aircraft 5 miles south of Cranfield at 2300 feet. He also suggested that PH-KDK should remain VMC and the pilot replied that he would try to do so. This transmission, shortly before 1644 hrs, was the last heard from the aircraft.

Meantime, several eye witnesses had seen the aircraft flying very low in snow on a track of 252°(T) as it passed some 5 miles north of Luton. Other witnesses had heard the aircraft orbitting close to the point where it crashed but at that time it was snowing heavily, ground visibility was less than 500 metres and the aircraft could not be seen. One eye witness, saw the aircraft fly two orbits. On the second, it was very low and steeply banked to the left when its left wing hit the tops of some trees. The aircraft then fell to the ground and immediately caught fire.

It crashed at approximately 400 feet amsl, some 100 feet below the summit of a ridge, which rose approximately 200 feet above the terrain to the north. The height of the aircraft when it first hit the trees was estimated to be approximately 480 feet amsl.

Subsequent examination of the wreckage indicated that the fuel mixture control was in the fully rich position at

impact, the throttle was approximately one inch aft of the fully open position, the carburettor heat control was selected to "HOT AIR" and the flaps were fully retracted. The conditions of the flying controls was consistent with the effects of the impact and ground fire, with no evidence of pre-crash failure. Examination of all the fragments from the perspex windscreen revealed no evidence of a bird strike. The altimeter sub-scale was set to 1007 mbs.

The wreckage was moved to the AIB facility at Farnborough, where a complete strip examination of the engine revealed no evidence of pre-crash engine failure.

Post mortem examination of the body of the pilot showed no pre-existing medical condition which might have had any bearing on the accident.