AAIB Bulletin No: 7/94 Ref: EW/G94/04/07 Category: 1.3

Aircraft Type and Registration: Cessna F172M Skyhawk, G-BCYR

No & Type of Engines: 1 Lycoming O-320-E2D piston engine

Year of Manufacture: 1975

Date & Time (UTC): 6 April 1994 at 1530 hrs

Location: Insch Airstrip, Grampian Region, Scotland

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 3

Injuries: Crew - None Passengers - None

Nature of Damage: Damage to mainwheel spat mountings, and leg fairing;

damage to front and rear car windscreens and roof

Commander's Licence: Private Pilot's Licence

Commander's Age: 65 years

Commander's Flying Experience: 308 hours (of which 19 were on type)

Last 90 days - 5 hours Last 28 days - 3 hours

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

further enquiries by the AAIB

The aircraft flew from Edinburgh Airport to Insch Airstrip on the morning of the accident. The pilot had previously received a telephone briefing on the layout of the grass landing strip, and had been told by the operator that the main strip (13/31 direction, some 547 metres in length, and unlicensed) was unusable due to water logging, but the area to the north east was available for landing and takeoff. The operator noted that the pilot had however used the area to the south west of the main strip, which consists of a rough surface with long tussocky grass, and has a windsock positioned in it. Details of obstructions, namely electricity cables, trees and the farm road, had been passed to the pilot. The farm road is a track which runs perpendicularly past the threshold of the 31 landing strip, and is bounded by a barbed wire fence on each side, the airfield side of the fence also being made highly visible by the use of orange coloured mesh netting.

The pilot met three passengers, including two children, and took them for a local flight of about one hour's duration. On returning to the airstrip for landing, the pilot reported that he turned onto final approach at about 2.5 nm, and selected full flap for landing. Approximately 100 metres from the

landing threshold, the pilot stated that he encountered sink, and applied full power and a nose high attitude to correct for it. At a late stage during the approach, the main landing gear of the Cessna straddled a Mercedes car which was proceeding slowly along the track, across the approach path of the aircraft, causing both front and rear windscreens of the car to implode. Neither the car driver, nor the aircraft pilot, observed the other approaching prior to the impact. However, just prior to crossing the threshold of the strip at right angles, there is a sharp bend in the road, prior to which the car was required to travel parallel to and in the same direction as the aircraft.

The aircraft continued to make a successful landing on the airstrip, also collecting a strand of barbed wire from the threshold boundary fence with its nose landing gear in the process. Fortunately, no injuries were sustained by anyone in either the aircraft or the car. The pilot noted that the cause was the presence of the car coupled with sink, or possible windshear.

Inspection of the track in the vicinity of the landing threshold was undertaken by the operator of the airstrip. He forwarded photographs of the location and a piece of broken barbed wire fence from the approach (*ie* downwind) side of the track, indicating that the aircraft may have also come into contact with this part of the fence during the accident. The pilot denied that the aircraft had contacted that particular piece of fencing, and stated that had the car not been present, then an uneventful arrival would have been accomplished. Statements were also obtained via the Grampian Police which indicated that two eyewitnesses were of the opinion that the aircraft was abnormally low during the final approach to land.

An aftercast from the Met Office indicated that at the time of the accident the surface wind was 280°/10 to 15 kt, and the wind at 2,000 feet was 260°/25 kt. Because of the local topography, some degree of turbulence was likely in these wind conditions.

A previous accident occurred to a Cessna F172M on 18 January 1992 while approaching Runway 31 at Insch, when the aircraft encountered an unexpected downdraught, causing it to contact an electricity cable.

Since this accident, the operator of the airstrip has erected warning signs along the track to indicate to motor vehicles the possible presence of low flying aircraft.