No: 12/87 Ref: 1c

Aircraft type

and registration: Cessna A150K G-XUSA

No & Type of engines: 1 Continental O-200-A piston engine

Year of Manufacture: 1979

Date and time (UTC): 25 September 1987 at about 1610 hrs

Location: Tollesbury, Essex

Type of flight: Private (pleasure)

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

Injuries: Crew — 1 (fatal) Passengers — 1 (fatal)

Nature of damage: Aircraft destroyed

Commander's Licence: Private Pilot's Licence

Commander's Age: 37 years

Commander's Total

Flying Experience: 3060 hours (hours on type not determined)

Information Source: AAIB Field Investigation

During the afternoon of Friday 25 September, the pilot and the passenger had attended a leaving presentation at Southend Airport. The pilot was seen to take several drinks of whisky from a bottle which was being passed among those present. The passenger was also seen to take a drink from a plastic cup which had been filled from the same bottle. About 45 minutes later, the same witness saw the pilot in the left hand seat of G-XUSA. It was stated that he had a half full bottle of whisky which, on at least two occasions, he raised to his mouth, as if drinking from it. The observer assumed this to be a joke, as he had known the pilot for 10 years and had never known him to drink before flying.

The aircraft took off at 1551 hrs and the departure clearance was to leave the zone VFR, not above 1000 feet. At 1604 hrs G-XUSA reported clear of the zone and requested a frequency change to Ipswich on 118.32 megahertz. No evidence was found of a call being made on this frequency.

At about 1605 hrs, several witnesses reported seeing an aircraft doing aerobatics, at low level, over the south shore of the Blackwater estuary. It was then seen to cross the river in a northerly direction flying over Osea Island at low level. The pilot of a light aircraft, flying in the area between about 1605 hrs and 1615 hrs, observed an aircraft carrying out aerobatic manoeuvres over the north shore, again at low level. The last manoeuvre observed was a loop which was orientated approximately south/north. It was not until about 1730 hrs, when a farmer noticed the wreckage in the field next to the one which he was ploughing, that the emergency services were alerted.

The aircraft was lying inverted alongside the hedge of a field of newly sown grass. Ground

marks, extending for 26 feet, indicated that the aircraft had struck the ground on a heading of 338° and with low forward speed. The cockpit was badly crushed, the rear fuselage substantially detached, and the nose distortion indicated that the aircraft had hit the ground at an attitude of 16° nose down with wings level.

The initial impact had removed both the left and the nose landing gear legs, the aircraft had then somersaulted and was lying inverted on a reciprocal heading 13 feet beyond the end of the initial impact marks.

Examination of the propeller indicated that the engine had been under power at impact, fuel was present in the fuel lines and approximately 8 imp/gall were recovered from the wing tanks.

No pre-crash defects were found with the flying controls.

Examination of both main wheel assemblies revealed vegetable matter trapped between the wheel and the brake disc; the vegetation was later compared with sugar beet leaves growing in an adjacent field and was found to be similar. A subsequent aerial survey of the field revealed wheel marks through the sugar beet pointing in the direction of the accident site.

An unbroken whisky bottle was lying by the wreckage. The cap was firmly closed and there was a small amount of whisky remaining.

The wreckage was removed to Farnborough where detailed examination failed to reveal any pre-crash defects.

A toxicology examination revealed that the pilot's blood alcohol content was 250 milligrams per 100 millilitres (mg/100 ml). The passenger's blood contained approximately 80 mg/100 ml.