

No: 3/91

Ref: EW/C1189

Category: 1c

Aircraft Type and Registration: Cessna F150F, G-ATPM

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

Year of Manufacture: 1966

Date and Time (UTC): 27 December 1990 at about 1445 hrs

Location: Near Bullington Cross, Winchester, Hants

Type of flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - Fatal Passengers - Fatal

Nature of Damage: Aircraft destroyed

Commander's Licence: Private Pilot's Licence

Commander's Age: 32 years

Commander's Total Flying Experience: 116 hours (of which 31 were on type)

Information Source: AAIB Field Investigation

The aircraft was based at the industrial complex on the south side of Lasham Airfield, Hampshire. After its previous flight, on 24 December, it had been booked in as having landed at 1540 hrs, with a fuel state of ½ tanks; this was estimated to be about 43 litres. On the 27 December, the pilot and his passenger arrived at the airfield at 1150 hrs and booked out for a flight to the Isle of Wight; the ETA back at Lasham was 1430 hrs.

At 1220 hrs the pilot carried out what appeared to be a power check before he taxied the aircraft to the refuelling point on the north side of the airfield. The pump was locked, and it was not possible to locate the key. The pump was operated by the local gliding society, the manager of which offered to break the lock. The pilot declined the offer and intimated that, as he only had ½ tanks, he would restrict his flight to the local area rather than going to the Isle of Wight as planned. The aircraft took-off, on the westerly runway, at about 1250 hrs.

Primary radar contacts, recorded from Heathrow and Pease Pottage heads indicated that, after orbiting the towns of Four Marks and then Bordon in Hampshire, the aircraft tracked southerly and passed over Petersfield at 1316 hrs. This position was reported to Southampton Zone Control on 120.225 MHz. The pilot stated that he was at 2000 feet, on a navigation exercise round the Isle of Wight and estimated

Portsmouth at 1330 hrs. He called overhead Portsmouth at about 1326 hrs and was advised to continue with Bembridge on 123.25 MHz. This he did, and the radar showed that the aircraft tracked round Bembridge and turned west over Shanklin to track towards the centre of the island. Radar contact was lost at 1351 hrs in the north west of the island.

At 1359 hrs, G-ATPM recalled Southampton Zone Control and reported his position as overhead the Needles, heading for Lymington at 2000 feet, routing Beaulieu, Stoney Cross to Lasham. Shortly before 1414 hrs, the aircraft reported Stoney Cross, and was informed that the Zone radar indicated an area of weather activity which extended 25 nm to the west from Southampton. The controller advised that an early turn on track would mean having to penetrate the weather for 5 or 6 nm, compared with 15 nm if the turn was delayed. About 5 minutes later there followed a discussion between the pilot and the controller about the weather and the possibility of diverting into Southampton. By now, the aircraft was heading back towards Stoney Cross and the controller advised that, as the weather was tracking rapidly towards the airfield, a diversion to Southampton would entail penetrating it. The pilot acknowledged this.

At 1423 hrs, the controller asked G-ATPM to confirm his position. The pilot replied that he was approximately 5 nm north of Stoney Cross, heading 280° and maintaining 2000 feet. He also said that he had passed through the weather and would be turning onto a heading of 047° for Romsey. Shortly after 1435 hrs he called north abeam Winchester and was told to go to enroute frequency; the pilot indicated that this would be Farnborough on 125.25 MHz. There was no evidence that any call was made on this frequency.

At 1440 hrs, G-ATPM made a MAYDAY call on the Southampton frequency which was immediately acknowledged by the controller. The subsequent message contained the following; ".....I've got low fuel it seems I've had a dicky gauge I am just south of Chilbolton....." and "...maintain a glide and bring her down to land next to the road and to a house." The controller asked the aircraft to squawk 7700 but it was not transponder equipped. The last transmission recorded from the aircraft was shortly before 1441:30 hrs; apart from the callsign this was unintelligible.

Several people saw the aircraft pass over the A34 dual carriageway, from east to west, at a low height. The nose was then seen to rise steeply, the left wing dropped and it nose dived into the ground. Shortly after the first witnesses had arrived on the site, flames were seen to be coming from behind and beneath the pilot's seat. These gradually increased in intensity until the fire filled the cabin area.

An aftercast, provided by the Meteorological Office at Bracknell indicated that there was a fresh to strong westerly airflow in the area; the wind at 2000 feet was 290°/40 kt and at the surface 270°/15 kt with gusts to 30 kt. The sun's elevation was 8° from 216°(T). The accident site was about 300 feet amsl.

The aircraft had struck the ground at low speed with no discernible ground run, coming to rest on a heading of 210° M. The initial ground impact, from the ground marks, was on a heading of 230° M indicating that the aircraft was yawing to the left at impact. The left wingtip had sustained damage

indicating a left wing low attitude, and the nose of the aircraft was well down at impact. These parameters strongly suggest that the aircraft was in a partly or fully developed spin when it struck the ground. The fire which broke out was localised but severe, and destroyed the cabin and the instruments. It appears to have been fed by fuel from the ruptured lines to the two wing tanks. The left tank was holed by the ground fire, however about a gallon of fuel was recovered, some from each tank, during the investigation. The Flight Manual states that the fuel capacity is 26 U.S. gallons of which 3.5 U.S. gallons is unuseable fuel.

The flying controls were examined in detail and, as far as could be determined, were serviceable at impact. The flaps were set to about 10 degrees. Examination of the engine and propeller has shown that the propeller was not turning at impact. The fuel shutoff valve was found in the OFF position. Due to the severe fire damage to the instruments and controls, little further information was available.