

Aircraft: Cessna T210L G-OILS

Year of manufacture: 1975

Date and time (GMT): 29 January 1982 at 1540 hrs

Location: Botley, near Southampton

Type of flight: Private

Persons on board: Crew - 2                      Passengers - 2

Injuries: Crew - Nil                      Passengers - Nil

Nature of damage: Fuselage deformation, starboard wing damage rendered aircraft beyond economic repair.

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 34

Commander's total flying experience: 4000 hours (of which approximately 6 hours were on type)

The aircraft was returning to Southampton from Cannes. Approximately 30 minutes after departure from Cannes, the pilot experienced a problem with the alternator which caused the fuel gauge to behave erratically and other electrical instruments to malfunction. The flight was continued under VFR and communication was maintained albeit with slightly reduced transmission range on VHF and the pilot was satisfied that he had sufficient fuel for the remainder of the journey.

During descent from 1500 feet after passing Portsmouth town the crew had been briefed to expect manual undercarriage extension and a flapless landing due to the lack of electrical power. Airfield approach checks were in progress, visual contact with Southampton airfield had been made and the pilot selected the starboard fuel tank which was estimated to contain the most fuel (10 imp. galls versus about 6 imp. galls in the port tank). However, at 1000 feet QNH, the engine lost power. The port fuel tank was re-selected but there was no engine recovery. The undercarriage was extended manually and the aircraft force-landed into wind on a grass field approximately 1100 feet in length. Although the aircraft touched down, within the first 100 feet, the flapless configuration and minimal braking action caused the aircraft to over-run the boundary hedge and come to rest on a major road, fortunately without injury to the occupants or significant damage to property other than the aircraft itself.

Rescue and recovery services reported that the aircraft was devoid of any fuel in either tank.

The reason for the lack of fuel has not been satisfactorily explained. The aircraft had been refuelled to full tanks at Southampton before the journey to Cannes, which had taken 4 hours 2 minutes and used 45 imperial gallons of fuel which matched the fuel flowmeter reading for the trip which averaged 75-85 pounds per hour.

The aircraft was instructed to be refuelled to full tanks (74 imp. galls total) at Cannes for the return trip and the pilot states that he was satisfied this had been done, although he did not physically check the fuel level by looking through the filler neck of each tank but observed fuel spilling from the starboard wing overflow pipe.

The return leg was scheduled to take 4 hours 34 minutes and, based on the figures achieved on the outward leg, should have taken about 54 imp. galls. The actual duration of the flight was 5 hours 7 minutes. The manufacturer's figures for this aircraft contained in the Pilot's Handbook give an endurance in excess of 6 hours using the RPM and manifold pressures the pilot of G-OILS was using.

The reason for the electrical generation problem was found to be a failed alternator drive belt. No evidence was found of any fuel leakage which could have contributed to the shortfall of fuel.