

AAIB Bulletin No: 2/93

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Category: 1c

Aircraft Type and Registration: Cessna 172P Skyhawk, G-BIRO

No & Type of Engines: 1 Lycoming O-320-D2J piston engine

Year of Manufacture: 1981

Date & Time (UTC): 10 December 1992 at 1335 hrs

Location: English Channel, approximately 5 nm south of Hastings, East Sussex

Type of Flight: Private

Persons on Board: Crew -1 Passengers -1

Injuries: Crew -None Passengers -None

Nature of Damage: Aircraft sunk and was not recovered

Commander's Licence: Commercial Pilot's Licence with Instrument Rating

Commander's Age: 30 years

Commander's Flying Experience: About 3,600 hours (of which about 80 were on type)
Last 90 days - About 15 hours
Last 28 days - About 2 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

History of the flight

The aircraft had been refuelled to full tanks at Elstree and parked over night before being flown to Angers in France the day before the accident, a flight of 2 hours and 10 minutes.

The refueller was not present when the pilot reported to Angers airfield to make the return flight to Elstree but, as the aircraft fuel gauges and the fuel level visible in the tanks each displayed an estimated 24 USG, he decided that this would be sufficient to fly the shorter distance to Lydd and refuel there. The weather conditions for the flight were: Wind 360°/10 kt, visibility more than 10 km, 6/8 stratus cloud between 3,000 and 4,500 feet.

The aircraft took off at 1225 hrs, and the pilot informed the London Flight Information Service of the changed destination, giving an ETA of 1320 hrs, which he later revised to 1330 hrs. Although, when leaving the French coast the fuel gauges showed about 9 USG remaining, indicating that the fuel consumption was according to that planned, 40 nm further on they indicated only 4 USG remaining. Because of the apparent sudden increase in consumption and some fluctuation due to slight turbulence,

the pilot was initially sceptical of the gauge accuracy but, when, 15 nm further on, the gauges indicated almost EMPTY, he transmitted a PAN call and he and the passenger donned their lifejackets. After a further 15 nm, the gauges showed EMPTY, so the pilot turned north towards the nearest land whilst transmitting a MAYDAY message. Although he changed the fuel tank selection from LEFT to RIGHT the engine then stopped.

A successful ditching was accomplished about 100 metres in front of a fishing vessel and, having evacuated the aircraft, both survivors were pulled aboard and taken to the shore. As each was suffering from shock and hypothermia, they were then taken to hospital by a waiting ambulance. The police also attended the scene, as did their helicopter and an SAR Sea King from RAF Manston.

The pilot has since stated that he neither saw evidence of a fuel leak nor smelled fuel during the flight and that he strictly monitored power settings according to the planned fuel flow.

Flight planning

The Flight Manual for this aircraft gives the total fuel as 38 USG useable and the endurance as 4 hours and 40 minutes; a consumption of about 8 USG/hour.

The flight to Angers had taken 2 hours and 10 minutes which, together with the planned flight time to Lydd, made a total flight time since refuelling of 4 hours and 15 minutes. The pilot states that, although this was close to the aircraft's total endurance, the weather at Lydd was good and he believed that the runway was of sufficient length to allow the aircraft to land even if it was partially obstructed.

Survival

The pilot reports that the passenger's lifejacket required inflation by mouth despite two attempts to activate the CO₂ bottle. He also comments that the passenger door had jammed in the accident and that the modified floor level pilot's seat adjuster was impossible to locate quickly in the circumstances. This caused the seat, which was in a forward position, to partially block the door on his side of the aircraft.