

**No:** 2/92

**Ref:** EW/G91/12/02

**Category:** 1c

**Aircraft Type and Registration:** Cessna 182F Aerobat, G-ASHB

**No & Type of Engines:** 1 Continental O-470-R piston engine

**Year of Manufacture:** 1963

**Date & Time (UTC):** 7 December 1991 at 1309 hrs

**Location:** Tilstock Airfield, Shropshire

**Type of Flight:** Private (parachute dropping)

**Persons on Board:** Crew - 1                      Passengers - 4

**Injuries:** Crew - None                      Passengers - None

**Nature of Damage:** Damage to propeller, wing holed and dented

**Commander's Licence:** Private Pilot's Licence with IMC and Night ratings

**Commander's Age:** 37 years

**Commander's Flying Experience:** 208 hours (of which 29 were on type)

**Information Source:** Aircraft Accident Report Form submitted by the pilot and additional telephone enquiry

The four parachutists had been despatched at 10,000 feet and the aircraft descended to join a left hand circuit at 800 feet for runway 15. The wind was from approximately 160° at 10 kt, flight visibility was more than 10 miles and there was no cloud cover but after landing the pilot noticed significant haze at ground level.

Turning base leg the pilot selected carburettor air to 'COLD', the mixture was fully rich, propeller RPM at 'HIGH', cowl flaps fully open and the fuel selector was at 'BOTH'. The pilot opened the throttle slightly and felt no response. He opened it fully and, still finding no response from the engine, he checked switch and control positions but saw nothing abnormal. He landed ahead in a field adjacent to runway 15 but short of the threshold.

The pilot reports that there was found to be fuel in the left tank, two inches on the dipstick, but virtually none in the right.

The normal procedure used by the pilot for parachute dropping had been to refuel to 'half tanks' as checked by dipstick and then to fly three high lifts to 10,000 feet or five low lifts giving an equivalent

total climbing distance within a maximum flying time of ninety minutes. At the time of the power failure he had completed four climbs since the last refuelling (two to 10,000 feet, one to 4,000 feet and one to 5,000 feet ) and, from his own watch, he thought that he was within the time limit. He later discovered that the watch was faulty.

Though only a short period of time was spent during final approach with the throttle closed and carb air cold the pilot does not entirely dismiss the possibility of carburettor icing being the cause of the power failure. An aftercast shows that though the upper air was very dry, below about 1500 feet the relative humidity rose to 70% with an air temperature of 2°C. This would produce conditions where moderate or serious carburettor icing could form even at high power settings. The Owner's Manual for the Cessna 182 recommends, in the 'BEFORE LANDING' checks, that carburettor air be selected 'HOT' before closing the throttle and returned to 'COLD' only after landing.