

Aircraft type and registration: Piper PA-25-235 G-BFEX

No & Type of engines: 1 Lycoming O-540-B2C5 piston engine

Year of Manufacture: 1977

Date and time (UTC): 16 February 1987 at 1650 hrs

Location: Eastling, Kent

Type of flight: Crop Spraying

Persons on board: Crew — 1 Passengers — None

Injuries: Crew — None Passengers — N/A

Nature of damage: Extensive structural damage. Beyond economical repair

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 41 years

Commander's Total Flying Experience: 5910 hours (of which 5500 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot.

The accident occurred on the 24th take-off of a series of fertiliser spreading flights. The grass strip used was about 500 yards long and the weather at the time was given as temperature, -2°C , 8 oktas of cloud at 1000 feet and a 5 knot northerly wind.

The aircraft was being refuelled when a snow storm passed through depositing about 1/2 inch of snow over a 30 minute period. The pilot reported that he then spent about twenty minutes clearing all the snow off the aircraft surfaces with a hand brush before restarting. He had also reduced the fertiliser load for the next flight by 112 lb to allow for the extra fuel.

About halfway along the take-off run the pilot reported that the aircraft felt heavy so he dumped the load but although the aircraft became airborne shortly afterwards it was unable to clear the 20 feet high overgrown hedge at the bottom of the field.

A.I.C. 52/85, Take-off, Climb and Landing Performance of Light Aeroplanes gives excellent advice on the effects of contaminated airfield surfaces on take-off performance. It reports that a snow covered surface can increase the "take-off distance" to a height of 50 feet by "25% or more".