

Aircraft type and registration: Varga 2150A Kachina G-BLHZ (light single engined, fixed wing aircraft)

Year of Manufacture: 1980

Date and time (GMT): 18 November 1984 at 1323 hrs

Location: Gravesend, Kent

Type of flight: Private (banner towing)

Persons on board: Crew — 1 Passengers — None

Injuries: Crew — None Passengers — None

Nature of damage: Minor

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 39 years

Commander's total flying experience: Approximately 1800 hours (of which 20 were on type)

Information Source: AIB Field Investigation

The aircraft was seen to take-off from Rochester airfield and pick up a 7 feet high aerial banner bearing 27 letters and symbols. It was then seen to fly left-hand orbits over the town of Gravesend for several minutes at a height at which the legend on the banner was clearly readable from the ground. A short time later eye-witnesses saw the aircraft at very low level over the town, and also saw the banner fall and drape itself over a house and across a nearby road. As the banner dropped the witnesses heard a "pop" from the aircraft engine, which then fell silent as the aircraft disappeared from sight behind houses. They then heard the engine restart and saw the aircraft reappear and climb away from them. Another eye-witness saw the aircraft touch down on the playing field of a school within the boundaries of the town, heard a surge of power from the engine, and saw the aircraft take-off again and climb away. Shortly afterwards the aircraft made an emergency landing in a field near a sports centre on the eastern edge of the town.

The following day wheel marks were found on the school playing field. These marks extended for 10 metres on a heading of 020° (M) along the length of the field, and the distances between them were comparable to the distances between the nose and main landing wheels of a Varga Kachina. They showed that the aircraft had touched down on all 3 wheels some 75 metres into the field, having passed over fenced tennis courts, and had lifted-off approximately 150 metres short of the buildings of a nursery school on the other side of the field. On the field where the aircraft finally landed wheel marks showed that it had touched down on rising ground on a heading of 170° (M), bounced for 36 metres, and rolled a further 90 metres before mounting a bank and coming to rest against a chain-link fence and a concrete gate-post. The propeller, spinner, engine cowlings, and right wingtip had suffered minor damage.

The aircraft was examined on site early the following morning. One eighth of a pint of fuel was found in the right fuel tank, but the left tank and bulkhead fuel drains yielded only a trace of fuel that was too small to be measured. There was no evidence in the aircraft or on the ground beneath of any fuel leak, and all 3 fuel drains appeared to operate and shut-off normally.

After minor repairs, engine runs and fuel system flow checks were carried out. They proved satisfactory, revealing no abnormalities or deficiencies in the operation of the engine or its fuel system. It was reported by the repair organisation that the fuel gauges when tested were found to be substantially accurate in the sector below half-full, but there was some divergence between the two gauges when the tanks were more than half full.

The aircraft did not have a Certificate of Airworthiness permitting banner towing. Because the pilot has not yet submitted a Flight Safety Report, no explanation is available of why the pilot should have flown the aircraft with insufficient fuel on board to safely complete the flight.