

Aircraft type and registration: Vickers Varsity T.1 G-BDFT (heavy twin engined fixed wing aircraft)

Year of Manufacture: 1952

Date and time (GMT): 19 August 1984 at 1009 hrs

Location: Marchington, Nr Uttoxeter, Staffs

Type of flight: Private

Persons on board: Crew — 2 Passengers — 12

Injuries: Crew — 2 (fatal) Passengers — 9 (fatal) 3 (serious)

Nature of damage: Aircraft destroyed by impact and fire

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 57 years

Commander's total flying experience: 7760 hours (of which 63 were on type)

Information Source: AIB Field Investigation

The Varsity aircraft was originally used by the Royal Air Force to train pilots and navigators in the air transport role. G-BDFT had been operated by an aircraft preservation group for the previous ten years, and it was intended to display the aircraft at Liverpool Airshow on the afternoon on Sunday 19 August.

With thirteen members of the group on board, the Varsity had departed from RAF Syerston, where it was hangered, earlier that morning to fly to East Midlands Airport. Here it was refuelled prior to departing at 0932 hrs for Liverpool. It had been pre-arranged that on the way to Liverpool the Varsity would rendezvous with a Cessna 180 aircraft so that air-to-air photographs could be taken on behalf of an aeronautical magazine. The rendezvous point was at Blithfield Reservoir some 22 miles to the west of the airport, and the intention was that the Cessna would fly at 3000 ft at about 120 kt and the Varsity would formate on its right hand side.

The Cessna was flown in a wide race-track pattern over the reservoir area, and during this time the port engine of the Varsity was heard to be back-firing and puffs of black smoke were seen at regular intervals. After the second orbit of the reservoir the photographer requested that the Varsity's undercarriage be lowered but the commander declined, saying he had a problem with his starboard engine. He was informed that smoke had been seen coming from his port engine, as if it were running too rich. The Varsity commander commented that he might be experiencing engine icing. (The Cessna pilot has since stated that his own carburettor temperature was well above the icing range.) The surviving passengers from the Varsity stated that the port engine had been back-firing during the formation flying, and it had been generally assumed that this was because the engines were throttled back to keep the speed down to that of the Cessna. They stated that towards the end of the photographic detail the starboard engine also started to misfire.

At 1005 hrs the commander of the Varsity informed the approach controller at East Midlands Airport that he might have to declare an emergency as he was having engine trouble and he requested a direct return to East Midlands. The commander also said that he could maintain height, though with some difficulty. Shortly after this the Cessna pilot informed East Midlands that he was also returning in company with the Varsity, which was now below 2000 feet.

Fifty seconds later the Cessna pilot reported that the engine of the Varsity had been shut down. Witnesses have stated that the remaining (starboard) engine was mis-firing badly at this time, and that the port engine was then seen to start to rotate again. The commander of the Varsity then reported that he was down to 400 feet, was losing power on both engines, and would have to put down in the nearest field. Almost immediately afterwards the left wing was seen to drop, and the aircraft rolled over and crashed inverted on waste ground on the edge of a gliding site. There was an immediate intense fire, but the rear part of the fuselage fell into a deep drainage ditch where it avoided the initial fireball of the burning fuel. The three survivors had been seated in this area in aft-facing seats.

The aircraft had uplifted 1980 litres of fuel at East Midlands. It has been established that this fuel was Avgas 100LL and that it conformed to the correct specification.

The Chief Inspector of Accidents has ordered an Inspector's Investigation under the Civil Aviation (Investigation of Accidents) Regulations 1983.