No: 9/87 **Ref: 1c**

Aircraft type and registration:	Beech A36TC Bonanza N6757Y
No & Type of engines:	1 Continental TSIO-520 Series piston engine
Year of Manufacture:	1980
Date and time (UTC):	4 June 1987 at 0110 hrs
Location:	6.5 nautical miles southwest of Glasgow Airport
Type of flight:	Private (pleasure)
Persons on board:	Crew — 1 Passengers — 1
Injuries:	Crew — 1 (fatal) Passengers — 1 (fatal)
Nature of damage:	Aircraft destroyed
Commander's Licence:	Commercial Pilot's Licence (United States of America)
Commander's Age:	44 years
Commander's Total Flying Experience:	1750 hours (of which 31 were on type)
Information Source:	AIB Field Investigation

On Tuesday 2 June 1987 the pilot flew a total of 13 hours, between Bangor, in the United States of America, and Goose Bay in Canada. On Wednesday 3 June the aircraft left Goose Bay at 0754 hrs and arrived at Keflavik, in Iceland at 1712 hrs. There was no suitable fuel available so the aircraft was repositioned at Reykjavik, arriving at 1738 hrs. After refuelling, with aviation gasoline, to 130 United States gallons (US/gal), it took-off at 1925 hrs for a flight to Glasgow.

At 2305 hrs the pilot established communications with Scottish Control and, at 2350 hrs, the aircraft was identified on radar 40 nautical miles (nm) to the northeast of Stornoway. Hand over to Glasgow Approach was at 0056 hrs and it was established that the approach would be radar vectoring to the ILS for runway 05. The weather was then passed as surface wind 180°/8 knots (kt), the direction being variable between 050° and 110°. The visibility was 8 kilometres in drizzle with cloud 1 okta at 600 feet, 5 oktas at 800 feet and 7 oktas at 1200 feet. The temperature was plus 10° Celsius and the dew point plus 9° Celsius. The QNH was given as 29.66 inches.

AT 0106 hrs the aircraft was 14 nm from touchdown at 3000 feet approaching the localiser, from the north. At 0108 hrs it was recleared to 2000 feet. Although, after an initial incorrect readback, this was acknowledged, the aircraft remained at 3000 feet. Just before 0110 hrs, the approach controller told the pilot that it appeared he had flown through the localiser. After a short delay, the pilot replied that he "realised the mistake" and was "intercepting now". That was the last recorded transmission from N6757Y. Study of radar recordings showed that the aircraft's speed and rate of descent increased rapidly and, within a minute, it struck the ground, at 400 feet above mean sea level, about 6.5 nm to the southwest of Glasgow Airport.

The aircraft was fitted with two 15 US/gal wing-tip tanks and carried an internal 80 US/gal ferry tank. It had struck the ground in a steep nose-down attitude, leaving clear imprints of both wing leading edges and the tip tanks in addition to a deep depression caused by the nose and engine of the aircraft. The accident site was in a farm field with domestic power cables running east-west across it suspended from wooden poles. One of these poles had been struck by the left wing root of the aircraft as it hit the ground. Further examination of the impact marks showed that the right wing had struck the ground first, followed rapidly by the nose and the left wing, suggesting some degree of right-hand bank. The heading of the aircraft at impact was about 060° magnetic.

The aircraft had clearly been travelling at high speed, since it was completely disrupted by the impact, and parts were thrown forward in excess of 70 metres. Both occupants suffered massive injuries.

Despite the fact that the aircraft was carrying a considerable quantity of fuel, as witnessed by a large area of fuel staining, there was no fire.

Detailed examination of the wreckage in conjunction with a representative of the manufacturer did not reveal any evidence of pre-impact structural failure nor any indication of a malfunction of the flying controls. The condition of the propeller blades suggested considerable power being present at impact. The altimeter barometric subscale indicated the correct QNH had been set and the display itself had jammed at the crash site altitude of 400 feet. Other instrument faces bore needle witness marks indicating a rate of descent in the order of 3400 feet per minute and an indicated airspeed of 235 kt. Similarly a needle witness mark on the manifold pressure gauge face indicated 30 inches of mercury, which approximates to a cruise power setting.