No: 4/86 Ref: EW/C954

Aircraft type

and registration: Pitts Special S-1D, G-LINT (light single engined fixed wing aircraft)

Year of Manufacture: 1982

Date and time (GMT): 15 March 1986 at 1601 hrs

Location: London Colney, near Watford, Hertfordshire

Type of flight: Private

**Persons on board:** Crew — 1 Passengers — None

Injuries: Crew - 1 (fatal) Passengers - N/A

Nature of damage: Aircraft destroyed

Commander's Licence: Private Pilot's Licence

Commander's Age: 41 years

**Commander's Total** 

Flying Experience: 1257 hours (of which 194 were on type)

**Information Source**: AIB Field Investigation.

G-LINT took off from Elstree shortly after a Tipsy Nipper, G-ASZV. The pilot of ZV described how, as he taxied out, he saw NT approaching the taxyway and gave a hand signal to its pilot to indicate that he would listen out on a specific non-allocated radio frequency after take-off. ZV flew to the disused airfield at Radlett, where he began to fly left-hand orbits at a height he recollected to be between 1000 and 1200 feet on the Elstree QFE of 1013 mbs. After a short time he was joined by NT, which began to dive, climb, and fly wingovers on the outside of his orbit. This pattern continued for a few minutes during which ZV descended slowly as it flew fairly tight left-hand turns at 55 mph. The pilot of ZV knew he was descending because it was his practice to lower the nose of the aircraft in turns to maintain airspeed, although he has no clear recollection of the height to which he descended during the turns. When he decided to return to Elstree, he began a turn to the right but, as he turned, he realised that his view of NT might be obscured so he rolled his wings level again to regain visual contact.

At this point he saw NT diving beneath him and well to his left travelling in the opposite direction. The aircraft was then obscured by his left wing and, as it reappeared behind the wing, he saw it dive into the ground at high speed.

Witnesses on the ground saw both aircraft and formed the impression that they were "dog-fighting". Accounts of the manoeuvres flown by the aircraft varied widely. Some witnesses stated that NT had completed a loop around ZV and had crashed while pulling out of the loop. Others believe they saw NT fly several downward "spirals", which might be interpreted to mean aileron turns. These latter witnesses all agreed that the aircraft had checked its rotation before crashing in the ensuing dive. All witnesses stated that both aircraft were manoeuvring at very low level.

After the accident, the altimeter of NT was found to be set to the local QNH, 1024 mbs. The accident site was 250 feet above mean sea level.

The aircraft crashed on a heading of 255°M on newly-sown farmland, which sloped upwards and to the right relative to the aircraft's flight path. It had struck the ground in a nose-down attitude of approximately 40°, banked slightly to the right, and had come to rest in about 2 feet. The damage to the aircraft and the nature of the ground marks suggested a high rate of descent and considerable forward speed.

There had been no pre-impact malfunction of the flying controls, nor was there any evidence of pre-impact structural failure. Examination of the 3-bladed propeller suggested that it had been rotating at impact, but only under moderate power.

In view of the obvious severity of the impact, the aircraft structure was remarkably intact. However, although the pilot had been wearing a full aerobatic harness, the impact proved to be non-survivable and the disruption of the fuselage space-frame had allowed the rear harness anchor point to move forward.