No: 12/87 Ref: 1c

Aircraft type

and registration: Scheibe SF-25B Falke G-AYIL

No & Type of engines: 1 Peiper-Stark Stamo M/S 1500/1 piston engine

Year of Manufacture: 1972

Date and time (UTC): 6 September 1987 at 0930 hrs

Location: Waldershare Park, near Dover, Kent

Type of flight: Training

Persons on board: Crew — 2 Passengers — None

Injuries: Crew — 1 Fatal Passengers — N/A

1 Minor

Nature of damage: Aircraft destroyed

Commander's Licence: Commercial Pilot's Licence

Commander's Age: 49 years

Commander's Total

Flying Experience: 5407 hours (of which over 1000 were on type)

Information Source: AAIB Field Investigation

On the morning of the accident the weather was fine with a 10—15 kt wind from the south west. G-AYIL had been refuelled that morning and had subsequently flown a sortie of 1 hour 15 minutes. The aircraft was serviceable after landing apart from some interference on the radio. It was decided that a more experienced pilot should conduct an airborne check on the radio which was to be combined with a dual instructional sortie. Normal pre-flight checks were carried out including a check of the fuel contents which established that there was adequate fuel for the proposed flight. The engine ran satisfactorily for the 2—3 minutes that it took to complete the required checks and briefing. Having decided that the engine was delivering full power at the start of the take-off run, the student pilot continued the take-off along the strip which was substantially into wind. At a height of about 50 feet, the pilot followed the normal procedure for the site and turned right through approximately 40° to align his climb-out track with a gap in the surrounding trees.

The normal climb-out track however, takes aircraft over the site of a gun club which is active on Sunday mornings. There was an existing agreement between the gun club and the gliding club operating the site that aircraft would not overfly the gun club when it was active. The instructor reminded the student that as it was a Sunday morning he should adjust his track to avoid the gun club. In response, the student entered a fairly steep right turn at a height estimated to be between 100 feet and 150 feet. This turn was entered at about 40 kts, the normal climbing speed, and stabilised at an angle of bank between 30° and 40°. Shortly after this turn was established, the instructor realised that the engine was stopping and immediately took control from the student. He continued the turn and lowered the nose to gain speed in order to

improve the manoeuvrability of the aircraft but was unable to avoid a wood which was downwind from the position where he suffered engine failure. The aircraft struck the trees in a nose down attitude banked 20° to the right. There was no fire but the student died from his injuries before reaching hospital. Both sets of 5 point harnesses had suffered partial failure.

Strip examination of the engine revealed significant quantities of water in the fuel filter bowl and engine driven pump together with large quantities of bacteria which indicated that water had been present for some time.

No evidence of any pre-crash defect in the flying control system or the engine was found.