No: 1/86 Ref: EW/G85/11/1

Aircraft type

and registration: Cessna 152, G-BJVJ (light single engined fixed wing aircraft)

Piper PA28, G-BFWB (light single engined fixed wing aircraft)

Year of Manufacture: 1981 and 1978

Date and time (GMT): 10 November 1985 at 1601 hrs

**Location:** Approximately 4 miles WNW of Cambridge

Type of flight: Both training

Persons on board: Crew - G-BJVJ - 1 Passengers - G-BJVJ - 1

G-BFWB — 1 G-BFWB — 1

Injuries: Crew — None Passengers — None

Nature of damage: G-BJVJ — Top of the fin and rudder assembly. Disconnection of

top rudder hinge.

G-BFWB — Detached left main landing gear, cracked left wing

main spar and damaged left flap.

Commander's Licence: G-BJVJ — Airline Transport Pilot's Licence with Instrument and

Full Instructor's rating. G-BFWB — Private Pilot's Licence.

**Commander's Age:** G-BJVJ — 46 years. G-BFWB — 22 years.

Commander's Total G-BJVJ — 6105 hours (of which 362 hours were on type)

Flying Experience: G-BFWB — 149 hours (of which 146 hours were on type)

**Information Source**: Aircraft Accident Report Form submitted by the pilots.

The pilot of G-BJVJ was instructing a pupil who was on his first flight. After take-off from Cambridge airfield the instructor flew the aircraft to the west and levelled off at 2000 feet. After a number of heading changes to avoid other aircraft the instructor decided to fly to the east of Cambridge and climb to 3000 feet in the hope of finding clearer airspace. The Cambridge Approach frequency was being monitored by the instructor, but because he was carrying out instructions and the frequency was very busy he did not listen to every transmission. The instructor, having checked that the airspace was clear continued his instruction. He had just taken control of the aircraft from the student when the student shouted and started to gesture. Simultaneously the instructor saw the bottom of another aircraft slightly to the right and ahead of them but too close to have time to take avoiding action. Almost immediately there was a collision. The aircraft continued to fly normally although there was visual damage to the fin and rudder. The instructor carried out a handling check and established that apart from the rudder being locked in the central position everything seemed normal. A Mayday call was transmitted and an uneventful low powered flapless approach and landing was made.

The pilot of G-BFWB was on a navigation exercise from Norwich to Oxford routing via Bury St Edmunds and Cambridge. Approximately 9 miles from Cambridge the pilot made contact with Cambridge on the Cambridge Approach frequency. The Cambridge controller asked the pilot to climb to 3000 feet on the regional QNH which he did. The pilot called the controller when he was overhead Cambridge airfield and confirmed that he was level at 3000 feet VFR. The controller

asked the pilot to contact him when he was clear of the Cambridge area or changing frequency. The aircraft was on a heading of approximately 267 degrees and because of the low position of the sun on the horizon and the haze, navigation was being carried out by looking either side of the aircraft. Without any warning a bang was heard and felt by the pilot and his passenger. Initially the pilot thought that a bird strike had occurred and noticed that the left flap was damaged. It was not until the Mayday call from G-BJVJ was heard that the pilot realised a mid-air collision had taken place. The pilot then made a Mayday call and descended to Cambridge Airfield. A low fly past of the control tower established that the left main landing gear was missing. The pilot successfully landed the aircraft on the grass runway.

The weather at the time of the collision was reported as, CAVOK, no cloud and visibility in excess of 20 kilometres.