No: 5/91 Ref: EW/G91/02/09 Category: 1c

Aircraft Type and Registration:

Jodel DR 1050, G-AXVS

No & Type of Engines:

1 Continental O-200-A piston engine

Year of Manufacture:

1960

Date and Time (UTC):

17 February 1991 at 1434 hrs

Location:

Airstrip near Sittingbourne, Kent

Type of Flight:

Private

Persons on Board:

Crew - 1

Passengers - 1

Injuries:

Crew - Serious

Passengers - Serious

Nature of Damage:

Propeller broken, both undercarriage legs collapsed, extensive damage

to the left-hand wing, the carburettor and the engine mounts.

Commander's Licence:

Private Pilot's Licence

Commander's Age:

55 years

Commander's Total

Flying Experience:

235 hours (of which 3 were on type)

**Information Source:** 

Aircraft Accident Report Form submitted by the pilot

The aircraft, which had recently been rebuilt, was being prepared for ferry to an M3 maintenance organization to be inspected in preparation for the reissue of a Certificate of Airworthiness. Following three test flights totalling about three hours, the pilot, who was also the rebuilder of this aircraft, planned a further short flight before the ferry flight, and a friend who was also a pilot, agreed to act as observer. The aircraft was started and taxied to the 'hold' where the pilot carried out his normal preflight checks. The take-off was normal and the aircraft climbed straight ahead to about 100 - 150 feet at which point the engine suddenly lost power. The pilot realised immediately the probable cause of the problem and attempted to make a turn to the right over a valley, in order to gain time to change the fuel tank selection. At the same time the passenger had instinctively pushed the stick forward to lower the nose and the aircraft straightened and began to sink. The engine stopped but both occupants could still hear the electric fuel pump: there was not time to turn off the magnetos or master switch before the aircraft, having just cleared some power lines, sank in a stalled condition to a heavy impact with the ground.

Both occupants were wearing conventional harnesses with diagonal upper torso restraints but both suffered injury to the face from impacts with the top of the instrument panel and the windscreen. Both pilots also suffered back injury from the vertical loads in the impact: in the Jodel DR1050 the front

seats are positioned directly atop the main spar. The aircraft came to rest with the tail in the air and the passenger managed to scramble out. Rescuers from the nearby farms and the airstrip managed to extricate the pilot, who had lost consciousness, and turned off the switches and isolated the battery.

A week later the wreckage was inspected the fuel pump drew fuel correctly from either tank when selected: both tanks were fitted with fuel gauges and the pilot states that both were in good working condition. In the Jodel DR1050 the forward fuel tank is mounted behind the engine firewall and the normal procedure is that this forward tank should be selected for take-offs and landings.

The pilot candidly states that he considers that the cause of the accident was that the aft tank, which had little or no fuel, was selected for take-off and not the forward tank, which had ample fuel for the flight. He further states that he considers that both fuel gauges and the fuel selector control are sufficiently well-placed and prominent in the cockpit: he considers that his failure to notice that the wrong fuel tank was selected may have been due to a combination of distraction just before the flight and a heavy workload on the days leading up to the accident.