

Avions Pierre Robin CEA DR300/180R, G-BVYM, 19 December 2002

AAIB Bulletin No: 2/2003

Ref: EW/G2002/12/08

Category: 1.3

INCIDENT

**Aircraft Type and
Registration:**

Avions Pierre Robin CEA DR300/180R, G-BVYM

No & Type of Engines:

1 Lycoming O-360-A4M piston engine

Year of Manufacture:

1972

Date & Time (UTC):

19 December 2002 at 1015 hrs

Location:

Tring Road, Dunstable

Type of Flight:

Private

Persons on Board:

Crew - 1

Passengers -
None

Injuries:

Crew - None

Passengers - N/A

Nature of Damage:

None to aircraft but broken power wires adjacent to
airfield

Commander's Licence:

Air Transport Pilots Licence

Commander's Age:

62 years

**Commander's Flying
Experience:**

20,540 hours (of which 300 were on type)

Last 90 days - 30 hours

Last 28 days - 4 hours

Information Source:

Aircraft Accident Report Form submitted by the pilot

The airfield at Dunstable is sited west of, and immediately adjacent to, a section of the Chiltern Hills which forms a ridge line oriented NE/SW to the west of the town of Dunstable. This ridge rises some 300 feet above the airfield, which itself is 500 feet amsl. The local topography is also such that the mean level of the airfield is some 30 feet above a road which runs adjacent to its northwestern boundary. A set of three phase 11,000 volt power wires are located along the western edge of this road on wooden support poles, which place the uppermost wire just above the local boundary of the airfield and approximately level with the airfield at the bottom of the catenaries formed by the suspended wire.

The wind at time of the incident was reported as 090°/10-15 kt gusting 28 kt and, under these conditions, significant turbulence and downdraughts are caused over and around the airfield as a result of the wind blowing over the top of the ridge towards the airfield, and from the airfield to the nearby lower ground. G-BVYM is one of four aircraft used at the airfield for towing gliders and on this occasion was making an approach to the field which, due to the wind direction, necessitated overflying the road. It is customary, after towing a glider, to return to the field and land with the tow rope attached. When making an approach over this road, pilots are normally required to make a high approach to ensure that any increased rate of sink that might be induced by the strong local downdraughts at the field boundary does not result in an undershoot and that the trailing rope makes ground contact on the airfield surface and not at, or before, the boundary. The pilot on this occasion, however, allowed the aircraft to become too low over the boundary and the tow rope caught around several of the power wires, causing three to break. These breaks occurred just above the airfield boundary level. The rope weak link, fitted close to the tail of the aircraft and rated nominally at a breaking load of 1200 lbs, failed as designed and the aircraft landed safely. The pilot reported that he was using a rope 216 feet long. This is approximately 30 feet longer than most ropes used by the club, but within the maximum length recommended by the British Gliding Association. The pilot considered that this had been a contributing factor in this incident.

The towing of gliders using light aircraft is a normal practise at most gliding clubs, and has been carried out at Dunstable for many decades. It was reported that the last time such an event occurred was approximately 15 years ago and that some 8,000 aerotows are carried out every year. However, the club has undertaken to standardise the length of ropes and has reinforced the approach procedure to be adopted when landing to the east in both their Tug Pilot Manual and on their tug pilot web site.