ACCIDENT

Aircraft Type and Registration:	EV-97 Teameurostar UK Eurostar, G-CDVP
No & Type of Engines:	1 Rotax 912-UL piston engine
Year of Manufacture:	2006
Date & Time (UTC):	4 June 2008 at 1900 hrs
Location:	Stonefield Park, near Chilbolton Flying Club
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - 1 (Serious) Passengers - N/A
Nature of Damage:	Aircraft destroyed, minor damage to overhead power cables
Commander's Licence:	National Private Pilot's Licence
Commander's Age:	53 years
Commander's Flying Experience:	105 hours (of which 94 were on type) Last 90 days - 21 hours Last 28 days - 10 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

During takeoff, the aircraft drifted left and the left wing hit power lines running parallel with the runway. The aircraft rolled left over the power lines and crashed into an adjacent field.

History of the flight

The pilot intended to fly back from Chilbolton to his base at Wycombe having flown in earlier in the day. He had not operated from Chilbolton before but received a telephone briefing from the airfield owner and experienced no difficulties on arrival. When ready for departure, the pilot assessed the wind as being 180°/6-8 kt. He started and taxied to the Runway 24 threshold. On reaching the Runway 24 threshold area, the pilot could see no runway end or edge markings and lined up on a strip of short grass, to the left of an area of longer grass. In a frank report, the pilot commented that he may have lined up on the grass to the left of the area routinely used as a runway and thus been closer to the power lines than normal.

G-CDVP became airborne at 45 to 50 kt, approximately 150 m from the start of the runway and climbed away normally. As it climbed above trees running parallel to the runway, the right wing lifted and as the pilot corrected he heard a "twanging" sound. The left wing had struck a set of power lines which run parallel with Runway 24 at a height of approximately 50 ft. The impact rolled G-CDVP in an anti-clockwise direction over the top of the power lines before it dropped, still with power applied, into the crop field adjacent to the power lines.

The ground impact caused considerable disruption to the fuselage and wing structure. The pilot, who was wearing a full harness, received serious injuries to the left side of his head possibly from contacting the canopy. He was knocked unconscious and suffered loss of memory.

Runway

Runway 24 has a declared length of 411 m and width of 18 m and is grass-covered. It is situated in a large field of crop or grass; at the time of the accident the runway grass was due to be cut and may have been longer than the surrounding grass. This resulted in the runway edges being ill-defined. Local pilots say the area between the left edge of the "runway" and the hedge is extremely rough with large rocks scattered in it.

Power lines are located along the airfield boundary hedge approximately 26 m to the left of the Runway 24 edge and run parallel with the runway. The lines consist of triple 33 KvA power lines horizontally spaced on top of approximately 50 ft high wooden poles. As is common on power lines near airfields, orange "ball" markers are suspended from each of the power lines.

Flight guides

Chilbolton airfield operates on a prior permission required (PPR) basis. The pilot of G-CDVP had gained PPR and was aware of the power lines running parallel with Runway 24. The power lines are shown on airfield maps available in the major flight guides and on the Chilbolton flying club website.

CAA Safety Sense leaflet 12 entitled '*Strip Sense*', contains the following information:

'It is important to realise that the CAA criteria for the licensing of an aerodrome e.g. clear approaches without power or other cables, no trees or obstructions close to the runway and so on, are unlikely to have been applied to the strip.'

Analysis

Chilbolton is an unlicensed and unmarked grass strip. In the absence of other guidance, the pilot has to decide where to operate within the strip. In this accident, the pilot believed the shorter grass was the correct area from which to depart from and this placed the aircraft closer to the power lines than usual. By positioning the aircraft closer to the known obstacles the pilot had less time to react to the weather-cock effects of the crosswind and the tendency for the aircraft to swing due to the effects of the propeller wash.

Subsequent action

At the time of this event the runway was unmarked. Following this accident, a set of flat white runway corner markers has been installed.