

No: 6/91

Ref: EW/G91/03/16

Category: 1c

Aircraft Type and Registration: Valentin Taifun 17E, G-OACE

No & Type of Engines: 1 Limbach L 2000-EBIB piston engine

Year of Manufacture: 1984

Date & Time (UTC): 28 March 1991 at 1145 hrs

Location: Vale of Neath Gliding Club, West Glamorgan

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Engine shock loaded; damage to propeller, engine cowl and canopy. Damage to nose landing gear.

Commander's Licence: Private Pilot's Licence with IMC and Gliding Instructor ratings

Commander's Age: 46 years

Commander's Flying Experience: 3,000 hours (of which 7 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot and subsequent AAIB enquiries.

Although the surface wind was 090°/7-10 kt, the pilot elected to use the runway 27 because it had a 900 metre run with no obstructions; after about 300 metres, the slope was downhill. He assessed the runway surface as "undulating, but with no sharp ridges or furrows which would have caused a sharp jolt or breaking action to the front wheel." At an indicated airspeed of about 35-40 kt, on the take-off run, the aircraft pitched forward and slid along the grass surface on its nose. The canopy sprung out of its rails, and both occupants, who were wearing diagonal upper torso restraint, escaped without injury. An initial inspection of the aircraft revealed that the nose landing gear had fully retracted.

The bellcrank in the nose landing gear mechanism had suffered an overload failure adjacent to a weld. The fracture was examined at RAE Farnborough and it was considered that the failure had not occurred as a result of any weakness in the weld or the area adjacent to it.

On the 2 September 1987, the aircraft had an accident (AAIB Bulletin 3/88) in which the nose landing gear had contacted the stones on the top of the embankment and the top wires of a fence. The nose

landing gear collapsed during the subsequent landing. Affected parts were repaired/replaced by the manufacturer.

The bellcrank was sent to the CAA for information, prior to being taken, by the aircraft owner, to the manufacturer's facility, in Germany, for examination.

Year of Manufacturer:	1990
Date & Time (UTC):	19 April 1991 at approximately 1830 hrs
Location:	Kikistan, near Ayr, Strathclyde
Type of Flight:	Private (training)
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - Fatal Passengers - Nil
Nature of Damage:	Aircraft destroyed
Commander's License:	Private Pilot's License, Group A
Commander's Age:	28 years
Commander's Flying Experience:	123 on fixed-wing aircraft and 15 hours on the B737
Information Source:	AAIB field investigation

The gyrodane was being operated from a level grass airstrip some 800 metres long, oriented north-east-south-west. The pilot was flying supervised training in accordance with an approved training syllabus and had completed 12 hours flying on the type during the preceding month. During the morning of the day of the accident he had practised take-offs and landings along the runway in a slight crosswind. The wind was from the north gusting up to 20 kt and the instructor had considered the wind conditions to be unsuitable for the pilot to fly complete circuits.

In the evening the wind dropped to about 10 kt, providing suitable conditions for circuit practice. The instructor briefed the pilot to carry out circuits and landings and then positioned himself close to the normal touchdown point to observe his student's progress. Following two successful circuits and normal landings, the student made a third approach, this time to a point approximately half way along the strip. The instructor observed that his speed, height and power setting were correct for landing but, just before the wheels touched the ground, he heard an increase in power and saw the aircraft climb steeply to between 75 and 100 feet. The nose then came down suddenly and the aircraft fell to the ground. The instructor's recollection was that it tumbled forward in a banking manoeuvre, without significant roll. There were no other eye witnesses to the accident.