

ACCIDENT

Aircraft Type and Registration:	Savannah VG Jabiru (1) microlight, G-CEGK	
No & Type of Engines:	1 Jabiru Aircraft Pty 2200 piston engine	
Year of Manufacture:	2006	
Date & Time (UTC):	3 May 2008 at 1430 hrs	
Location:	Church Inn Field, approximately 10 miles NW of Chichester, West Sussex	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to landing gear, wingtips and propeller	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	44 years	
Commander's Flying Experience:	482 hours (of which 70 were on type) Last 90 days - 26 hours Last 28 days - 12 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The aircraft encountered a severe downdraught at a height of 30 ft on approach to land at a private strip located near a ridge. The pilot was unable to arrest the sink rate and the aircraft struck the ground heavily. The pilot and passenger, who were wearing full harnesses, were uninjured.

History of the flight

The aircraft had already completed a flight from Popham airfield to Church Inn Field, a private strip without marked runways. After a successful landing in a south-westerly direction, the pilot and passenger visited the passenger's home for some refreshments.

When they returned to the aircraft, the wind was observed to be light, but now favourable for a takeoff in the opposite direction, to the north-east. After takeoff, at a height of approximately 400 ft, the pilot decided to make an approach to the strip to land in a north-easterly direction. When approximately 100 metres from the threshold and at a height of about 30 ft, the aircraft encountered a severe downdraught. Despite the application of full power, it continued to sink and struck the ground heavily. The nose leg collapsed, causing the aircraft to slew to the left and the propeller and both wingtips contacted the ground.

The occupants, who were wearing full harnesses, were uninjured and vacated the aircraft via the doors.

Wind and topography

The Met Office provided an aftercast for the weather for the time and location of the accident. The surface wind direction and speed were estimated to be 120° to 130° at 10 to 15 kt.

There are ridges to the east and west of the strip, which lies close to the foot of the western ridge (Figure 1). The wind direction at the time would have placed the strip downwind of the ridge and downdraughts and

turbulence would be expected at low level (Figure 2). The ridge to the east may also have influenced the local airflow. The combined effect of the two ridges is difficult to assess, although a scenario in which marked changes in vertical and horizontal wind strength for the approach could readily be envisaged.

The pilot attributed the accident to the downdraught created by the adjacent hills. This is a well known phenomenon and pilots are advised against flying at low level downwind of high ground, particularly in strong wind conditions, or in aircraft with low wing loadings that are susceptible to gusts.

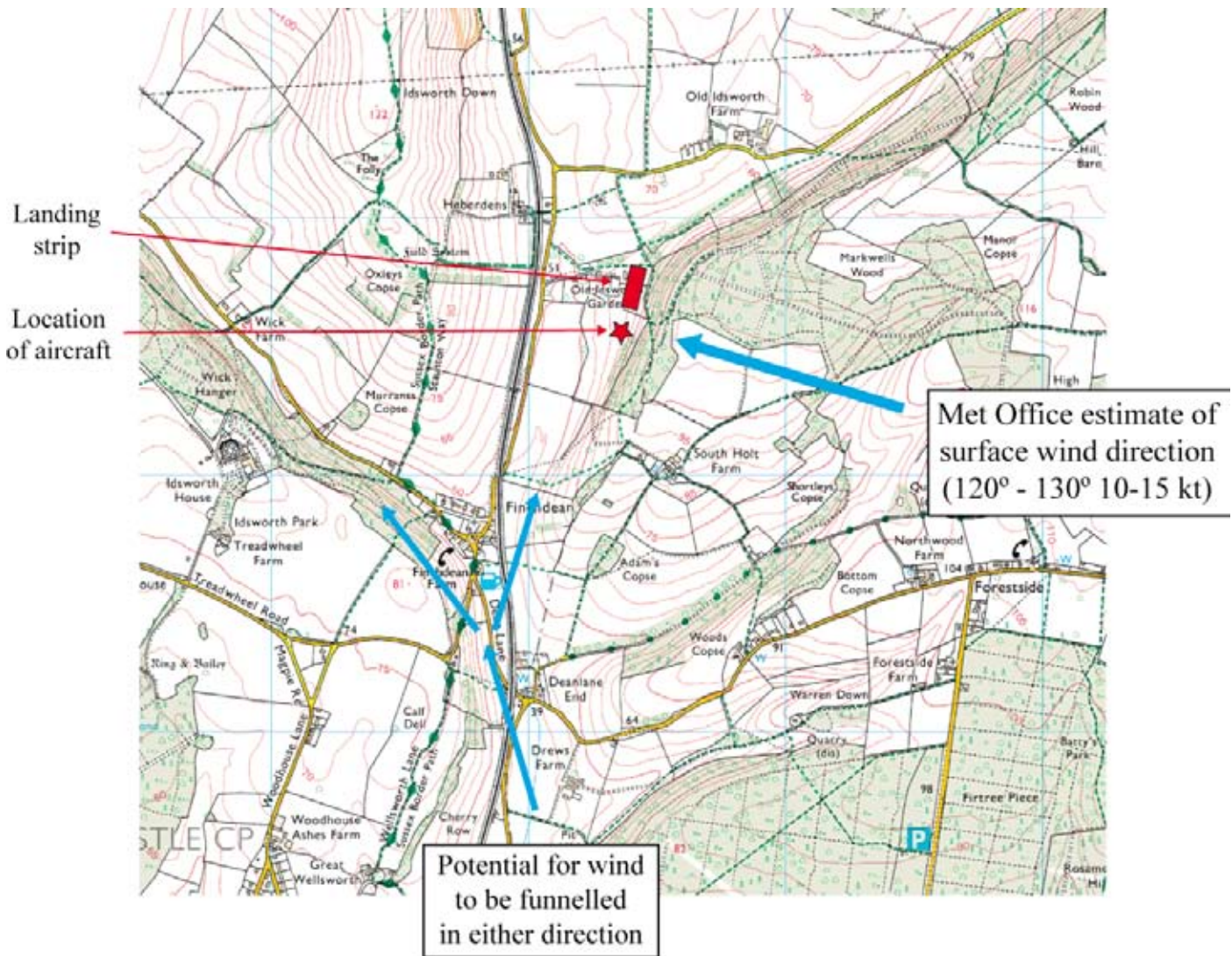


Figure 1

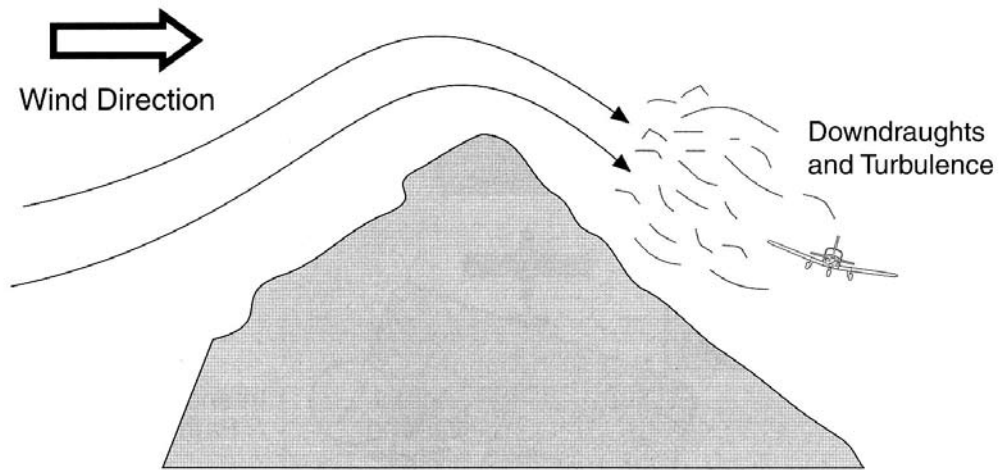


Figure 2

Dangers of flying at low level downwind of high ground
(Figure copyright AFE and Jeremy M Pratt)