

ACCIDENT

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| Aircraft Type and Registration: | Chaser S, G-MVVU | |
| No & Type of Engines: | 1 Rotax 462 piston engine | |
| Year of Manufacture: | 1988 | |
| Date & Time (UTC): | 28 August 2007 at 1115 hrs | |
| Location: | Burton on the Wolds, Leicestershire | |
| Type of Flight: | Private | |
| Persons on Board: | Crew - 1 | Passengers - None |
| Injuries: | Crew - 1 (Serious) | Passengers - N/A |
| Nature of Damage: | Aircraft destroyed | |
| Commander's Licence: | National Private Pilot's Licence | |
| Commander's Age: | 54 years | |
| Commander's Flying Experience: | 43 hours (of which 11 were on type) Last 90 days - 0 hours Last 28 days - 0 hours | |
| Information Source: | Aircraft Accident Report Form submitted by the pilot | |

Synopsis

The weight-shift microlight aircraft encountered a gust just prior to the intended landing. Despite the application of power and moving the control bar forwards, the pilot was unable to prevent the aircraft from landing short of the runway.

History of the flight

The pilot had planned to fly early in the day to take advantage of calmer conditions but he was persuaded to fly later in the morning so that he could fly at the same time as another pilot in another aircraft.

The takeoff and climb out were uneventful. However the pilot reported that he became unhappy with the rough and thermic conditions and decided to turn back

to his departure point. The last eight miles or so were at low level due to the proximity of East Midlands Airport airspace, and the pilot reported that the conditions were deteriorating, with strong thermals and rough air.

The pilot made five approaches and go-arounds to the runway, which is in a northerly direction, and on his sixth approach he felt that he was correctly positioned to land. Just before the anticipated touchdown the aircraft encountered severe sink and, despite the application of full throttle and moving the control bar forwards, the aircraft struck the ground approximately 30 ft before the start of the runway, in an area of steep upslope. The aircraft collapsed on impact and bounced before coming to rest on the runway, with the pilot trapped

underneath and fuel leaking from the tank. The pilot, who was wearing a lap harness and a helmet, sustained two broken legs, but managed to scramble clear of the wreckage unaided, in the absence of any assistance.

Aircraft information

The Chaser S is a single seat, weight-shift microlight with a 'Pterodactyl' wing. As with all microlight aircraft the wing loading is low, and they are susceptible to gusts.

Weather conditions

The pilot reported the weather as hot and sunny with more than 20 miles of visibility and with the wind from the north-north-west, gusting at more than 10 kt, with increasing thermic activity.

The forecast conditions for Nottingham East Midlands around the time of the accident were wind variable at 4 kt, unlimited visibility with scattered cloud at 3,000 ft (lowering to 1,800 ft later) and broken cloud at 4,500 ft.

The reported conditions for Nottingham East Midlands at about the time of the accident were: at 1120 UTC, wind variable at 2 kt, unlimited visibility, few clouds at 800 feet, broken cloud at 1,800 ft, surface temperature 16°C, dew point 11°C, surface pressure 1023 hPa. The observation at 1050 UTC had been the same, except that

the wind had been variable at 3 kt and the dew point had been 12°C.

An isobaric analysis carried out by the Met Office concluded that the surface wind was variable at 2 kt.

The conditions measured by the (Watnall) Nottingham weather balloon, launched at 1115 UTC, were very representative of those at the time and location of the accident. This was used by the Met Office to assess temperature and cloud formation. The surface temperature was estimated to be 16°C and, whilst there was convective activity associated with cumulus development, it was doubted that any maximum wind gust would be greater than 10 kt in any direction, a little lower than that reported by the pilot.

Comment

The pilot's low experience and low recency appear to be the main factors affecting his ability to deal with the conditions. The information from the Met Office would indicate that the wind was lighter than the pilot reported although there was clear evidence of convective activity which could have led to the gusty conditions. Peer pressure to fly at a later time, rather than earlier when it would probably have been calmer, may also have been a factor.