

ACCIDENT

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|----------------------------------------|--------------------------------------------------------------------------------------------|------------------------|
| Aircraft Type and Registration: | Flight Design CTSW, G-CEDM | |
| No & Type of Engines: | 1 Rotax 912ULS piston engine | |
| Year of Manufacture: | 2006 | |
| Date & Time (UTC): | 23 October 2010 at 1305 hrs | |
| Location: | North Coates Airfield, Lincolnshire | |
| Type of Flight: | Private | |
| Persons on Board: | Crew - 1 | Passengers - 1 |
| Injuries: | Crew - 1 (Serious) | Passengers - 1 (Minor) |
| Nature of Damage: | Aircraft destroyed | |
| Commander's Licence: | National Private Pilot's Licence | |
| Commander's Age: | 45 years | |
| Commander's Flying Experience: | 274 hours (of which 240 were on type) Last 90 days - 35 hours Last 28 days - 8 hours | |
| Information Source: | Aircraft Accident Report Form submitted by the pilot | |

Synopsis

Due to the prevailing crosswind, which had increased since his departure one hour earlier, the pilot decided to land the aircraft on a much shorter grass area, adjacent to the threshold of Runway 23, which had a reduced crosswind component. During the latter stages of the approach, the pilot abandoned the landing, but at about 80 ft, whilst banking right away from an area of trees, the aircraft rolled rapidly to the right. The right wingtip struck the ground and the aircraft cartwheeled. Both pilot and passenger sustained whiplash injuries to the neck. The pilot also suffered a broken left ankle. The aircraft was destroyed.

History of the flight

The pilot was returning to North Coates Airfield, following a local flight of about one hour duration. North Coates has a single unlicensed grass runway, on a heading of 07/23. Near to the threshold of Runway 23 is a much shorter grass area, bounded to the north by an area of trees. The pilot reported that he took off from Runway 23, with a westerly wind of about 20 kt but, upon returning to the airfield, he noted from the windsock that the wind was now from a northerly direction across the runway. He estimated the wind speed to be between 25 and 30 kt.

Initially he positioned the aircraft for a landing on Runway 23, but due to the high crosswinds and turbulent conditions, he abandoned the approach. Having had

previous experience of landing on the north-south grass area, he advised the air/ground radio operator that he would land there in a northerly direction, into wind. The approach appeared normal, but shortly before touching down the pilot abandoned the landing and applied full power. As the aircraft climbed to about 80 ft, level with the tops of the trees ahead, the pilot started to make a progressive right turn. The aircraft rolled rapidly to about 90° right wing down. The pilot applied full left rudder and full left aft stick, but the aircraft failed to respond. The right wing tip struck the ground and the aircraft cartwheeled, before coming to a stop. The pilot and passenger were both wearing four-point harnesses and were able to vacate the aircraft unaided. Both pilot and passenger sustained whiplash injuries to the neck and

the pilot also suffered a broken left ankle. The aircraft was damaged beyond economic repair.

The pilot considered that the cause of the accident was due to the aircraft entering turbulent air near to the top of the tree line during the go-around. The Pilot's Operating Handbook (POH) states that the maximum crosswind components for takeoff and landing are 16 kt to 13 kt for flap settings of -6° to 15° and 13 kt to 11 kt for flap settings of 15° to 40°. The POH also provided the following guidance regarding wind limitations:

'In gusty wind or wind speeds greater than 21 kt (24 mph) flight operations should be stopped.'