Factual Report

Identification

Type of Occurrence: Accident
Date: 16 June 2007
Location: Seedorf airfield
Aircraft: Aeroplane
Manufacturer / Model: Avions Pierre Robin / DR 400-160
Injuries to Persons: Pilot and two passengers fatally injured
Damage: Aircraft destroyed
Other Damage: Forest damage
Source of Information: Investigation by BFU

Factual Information

History of the flight
According to the statements of the crews involved, an unplanned safety landing caused by weather conditions occurred at 12:37 hrs\(^1\) at Seedorf special airfield during a French flying club's planned air trip abroad with three aircraft en route from Hoogeveen/Netherlands to Oskarshamn/Sweden. The three aircraft landed in westerly direction. After weather conditions had improved, the intention was to take off and continue the flight to Sweden. Due to the short grass strip and wet conditions, the strip was first inspected and evaluated on foot. Afterwards, the first two aircraft, a DR 400-180 with three persons and a DR 400-160 with two persons on board, took off at 13:00 hrs in westerly direction against the wind. They used the whole additional grass area to the east of the strip for the take-off run, both aircraft came free near the halfway-mark. The aircraft circled the airfield in order to wait for the third aircraft. Due to delays occurring with the third aircraft, the other two aircraft already in the air left towards the east.

On board of the remaining aircraft were three persons, approx. 150 litres of fuel, and the holiday luggage.

At about 13:10 hrs, a witness noticed a cloud of smoke near Seedorf special airfield. At about 16:30 hrs, the police found the burnt-out aircraft at the north-eastern end of the airfield, approx. 150 m to the left of the end of grass strip 06 in a forest.

The three occupants could only be recovered dead

---

\(^1\) All times specified are local times unless stated otherwise
The crews which had already taken-off made the next unplanned landing due to weather conditions at Lunenburg, waited there for the third aircraft, and finally initiated a search.

Apart from the person who noticed the cloud of smoke there were no witnesses to the accident.

Personal Information

The aircraft had three occupants of which two held a private pilot licence. They took turns at the controls from one flight to the next.

The landing in Seedorf was executed by a 63-years-old pilot with a total flying experience of approx. 1,165 hours. He had acquired his French private pilot licence in 1990.

At take-off, a 61-years-old female pilot sat in the left-hand seat of the pilot-in-command. She held a French private pilot licence, issued in 1997, and had a total flying experience of approx. 430 hours. Within the last 90 days, she had flown for 5 hours.

Aircraft Information

The aircraft involved in the accident was a Robin DR 400-160 CHEVALIER, manufactured in 1973 by Avions Pierre Robert, serial no. 871. The maximum take-off weight was 1,050 kg with an empty weight of 610 kg. The aircraft was powered by a Lycoming O-320-D2A rated at 160 HP in combination with a fixed-pitch propeller.

The aircraft had accumulated a total of 5,795 hours of flying time. It was operated and serviced by a flying club. Its certificate of airworthiness was valid until 1 August 2009, the last 50-hours check had been executed on 14 June 2007, two days before the accident.

Meteorological Information

Northern Germany was covered by a humid, unstable air mass with occasional single thunderstorms, but also thunderstorms occurring in lines with heavy rain.

The wind was blowing from 220° at 10 kt, near thunderstorms it was gusty up to 25 kt. Flight visibility was more than 10 km, going down to 4,000 m in rain.

The temperature was 20° C, the air pressure (QNH) 1,004 hPa.

Communications

No radio communication was recorded. The crews who had already taken off did not have radio contact with the crashed aircraft before or during its take-off.

Aerodrome Information

Seedorf special airfield is situated within a military area and is operated by a Dutch flying club. It has a grass strip 450 m long in 06/24 direction with grass areas of approx. 250 m on both ends of the strip. The grass had not been mown for a longer period of time. Due to the rain on the days before, the strip was wet and the soil was soft. The airfield is surrounded by forests. Its elevation is 72 ft MSL.

At the time of the safety landing and the accident, there was nobody on site. The airfield was closed.

Aircraft Information

The aircraft involved in the accident was a Robin DR 400-160 CHEVALIER, manufactured in 1973 by Avions Pierre Robert, serial no. 871. The maximum take-off weight was 1,050 kg with an empty weight of 610 kg. The aircraft was powered by a Lycoming O-320-D2A rated at 160 HP in combination with a fixed-pitch propeller.

The aircraft had accumulated a total of 5,795 hours of flying time. It was operated and serviced by a flying club. Its certificate of airworthiness was valid until 1 August 2009, the last 50-hours check had been executed on 14 June 2007, two days before the accident.

Flight recorders

A VFR flight plan was available for the flight from the original starting point Hoogeveen (EHHO) to Oskarshamn/Sweden. The route of flight up to the landing at Seedorf as well as the further flight of the other two aircraft to Lunenburg could be retraced based on radar images. There were no recordings about the take-off of the crashed aircraft.

According to the statements by air traffic control, no contact was made with a traffic control station or with a flight information station.
Wreckage and impact information

The site of the accident was situated approx. 150 m to the north-east of the end of grass strip 06, with an offset of approx. 30°, at Seedorf special airfield at the beginning of a forest.

The trees were first touched with the right wing at an altitude of approx. 5 m. The right wing was torn off between aileron and landing flap and stayed hanging in the tree. As a result, the aircraft hit the ground head-on 13 m away and caught fire in an explosion.

All components of the aircraft were found close to the site of the accident. However, some of them were completely burnt. Remnants of the steering and control-surface fittings were found, they did not show any signs of technical defects.

Medical and pathological information

The autopsy of all three occupants did not reveal any signs of medical impairments.

Fire

After the aircraft had hit the ground, a fire was caused in an explosion, the fire destroyed the whole aircraft.

Survival aspects

Due to the repeated enquiries of the flight manager at Lunenburg, the aircraft was reported missing. The two other crews were concerned but assumed that the aircraft had found a way through the bad weather and was on the way to Sweden. Therefore, the duty officer in Bremen and later on in Copenhagen was only asked about the aircraft at around 16:00 hrs. Later on the police at Zeven was asked to search for the aircraft in Seedorf. The aircraft was found at about 16:30 hrs.

Additional information

According to the aircraft manual of the DR 400-160, the take-off run under the given circumstances (wet grass strip with soft soil, tailwind of 10 kt, temperature of 20° C, maximum take-off weight) would have been 740 m to take-off and 1,250 m to clearing a 15-m-obstacle.

Investigator in charge
Rokohl

Assistance
Friedemann
On side: Ardey de Jelski