

Accident to the WASSMER-Jodel D120 registered F-GUZY

on 29 March 2014

at Vannes Meucon (Morbihan)

⁽¹⁾ Unless otherwise stated, all times given in this report are in local time.

Time	Approximately 17:20 ⁽¹⁾
Operator	Private
Type of flight	Training
Persons on board	Pilot and instructor
Consequences and damage	Aircraft damaged
This is a courtesy translation by the BEA of the Final Report on the Safety Investigation published in April 2020. As accurate as the translation may be, the original text in French is the work of reference.	

Loss of control during take-off run, ground loop, failure of main landing gear, in training

1 - HISTORY OF THE FLIGHT

Note: the following information is mainly based on the statements.

⁽²⁾ 1,530 m long and 45 m wide, take-off distance available (TODA) 1,530 m.

The pilot, who was accompanied by an instructor, lined up on paved runway 22⁽²⁾ for a rating revalidation flight. The wind announced by the controller was 160° at 10 knots. During the take-off run, after the tail rose off the ground from a three point to a level flight attitude, the aeroplane deviated to the left. The pilot corrected the path with his pedals resulting in the aircraft deviating to the right. Further pedal inputs caused the aircraft to deviate back to the left and the aircraft entered a left-hand ground loop on the runway. The main landing gear failed and the aircraft came to rest on the runway.

Both legs of the main landing gear were bent leftwards by lateral forces.

2 - ADDITIONAL INFORMATION

2.1 Pilot's experience and statement

The pilot, aged 59, had owned F-GUZY since September 2013. He held a PPL(A) licence and had logged:

- 490 flight hours, including 326 hours as pilot-in-command, and 3 hours 30 minutes in the preceding three months.
- 2 hours 20 minutes on aircraft with conventional landing gear in the last twelve months, all of which were in dual command on F-GUZY and 1 hour 50 minutes in the preceding fifteen days.

He indicated that the ground loop happened very fast. He explained that because of the type of leather shoes he was wearing, his soles slipped onto the brake pedals, thereby activating the braking system.

2.2 Instructor's experience and statement

The 62-year-old instructor had logged approximately 2,000 flight hours on aircraft with conventional landing gear, including 400 hours on Jodels, and 3,350 flight hours as an instructor, including 60 hours since July 2013.

He indicated that, during the take-off run, the pilot applied a significant pedal correction to counter the left yaw. He added that the pilot applied the brakes during this action, resulting in a right yaw. To counter this movement, the pilot once again applied significant pedal and brake inputs, leading to another left yaw and the ground loop.

The instructor and the pilot had flown together several times before.

2.3 Aircraft information

The Jodel D120 is an aircraft equipped with conventional landing gear. Its braking system comprises an independent system on each main landing gear wheel. Braking is achieved by pressing on the pedals on both sides of the upper part of the pilot's rudder pedals. There is no brake on the pedals in the right-hand seat.

2.4 Meteorological conditions

At the time of the accident, the wind was from 150°, varying between 120° and 180°, at 10 kt. A maximum peak of 18 kt and a direction of 120° was recorded at 17:08.

3 - CONCLUSIONS

The conclusions are established solely on the basis of the information that came to the knowledge of the BEA during the investigation. They are in no way intended to apportion blame or liability.

Scenario

During the take-off run, the crosswind component and engine effects caused the aircraft to enter a left yaw, to which the pilot most probably responded by over-applying the rudder pedals and unintentionally applying the brake control at the top of the rudder pedals. These actions, taken in response to the deviations from the path, exacerbated the aircraft's movements, resulting in the left-hand ground loop. The failure of the main landing gear was caused by the lateral forces exerted during the deviation from the path before the ground loop.

Contributing factors

The following factors may have contributed to the loss of control of the aircraft during the take-off run:

- ❑ An unintentional braking action while applying rudder inputs, which may be explained by the leather soles of the pilot's shoes sliding on the rudder pedals.
- ❑ The absence of a braking system in the right seat, which meant that the instructor, in reaction to the dynamic nature of the situation, was unable to mitigate and recover the situation before the ground loop occurred.
- ❑ The pilot's limited experience on aircraft with conventional landing gear.