

AA2020-2

**AIRCRAFT ACCIDENT
INVESTIGATION REPORT**

**NEW CENTRAL AIRSERVICE CO., LTD.
J A 3 9 6 2**

April 23, 2020

The objective of the investigation conducted by the Japan Transport Safety Board in accordance with the Act for Establishment of the Japan Transport Safety Board and with Annex 13 to the Convention on International Civil Aviation is to determine the causes of an accident and damage incidental to such an accident, thereby preventing future accidents and reducing damage. It is not the purpose of the investigation to apportion blame or liability.

TAKEDA Nobuo
Chairman
Japan Transport Safety Board

Note:

This report is a translation of the Japanese original investigation report. The text in Japanese shall prevail in the interpretation of the report.

AIRCRAFT ACCIDENT INVESTIGATION REPORT

March 27, 2020

Adopted by the Japan Transport Safety Board



Chairman TAKEDA Nobuo
Member MIYASHITA Toru
Member KAKISHIMA Yoshiko
Member MARUI Yuichi
Member MIYAZAWA Yoshikazu
Member NAKANISHI Miwa

Company Name	New Central Airservice Co., Ltd.
Type, Registration Mark	Cessna 172P JA3962
Accident Class	Aircraft Damage caused by Bird Strike
Date and Time of the Occurrence	December 18, 2019 at around 13:48 JST (JST: UTC+9 hours; unless otherwise stated, all times are indicated in JST in this report on a 24-hour clock)
Site of the Accident	Ryugasaki Airfield in Ryugasaki City, Ibaraki Prefecture (35° 54' 22" N, 140° 14' 29" E)

1. PROCESS AND PROGRESS OF THE AIRCRAFT ACCIDENT INVESTIGATION

Summary of the Accident	<p>On Wednesday, December 18, 2019, the Aircraft collided with a bird during the take off from the airfield, and consequently sustained damage to the structure.</p> <p>There were three persons on board, consisting of a captain, a trainee and a passenger, and there were no dead and injured.</p>
Outline of the Accident Investigation	<p>The Japan Transport Safety Board designated an investigator-in-charge and an investigator on December 19, 2019 to investigate this accident.</p> <p>Comments were invited from parties relevant to the cause of this accident. Comments were invited from the Relevant State.</p>

2. FACTUAL INFORMATION

Aircraft Information	
Aircraft type:	Cessna 172P
Serial number: 17275508;	Date of manufacture: December 18, 1981
Certificate of airworthiness: No. TO-2019-149;	Validity: July 6, 2020
Personnel Information	
Captain:	Male, Age 60

Commercial pilot certificate (Airplane)	July 16, 1982
Specific pilot competence certificate	
	Expiry of practicable period for flight: April 23, 2021
Type rating for Single-engine (Land)	July 16, 1982
Class 1 aviation medical certificate	Validity: September 3, 2020
Flight Instructor certificate (Airplane)	July 22, 2003
Trainee:	Male, Age 27
Private pilot certificate (Airplane)	May 31, 2019
Specific pilot competence certificate	
	Expiry of practicable period for flight: October 8, 2021
Type rating for Single-engine (Land)	May 31, 2019
Class 2 aviation medical certificate	Validity: June 21, 2024

Meteorological Information

According to the captain, weather conditions at the time of the accident at the airfield were a fair sky, a weak wind, wind direction of 290 ° to 300 ° and prevailing visibility of 10 km or more.

Details of the Accident and Related Information

(1) History of the Flight

The Aircraft took off from the airfield at 12:22 for training with the trainee who took control of the Aircraft sitting in the left pilot seat and the captain sitting in the right pilot seat as an instructor. The Aircraft returned to the airfield after flight training in the training area and commenced touch-and-go training. At around 13:48, immediately after the take off following the landing in the second round of the touch-and-go, a bird suddenly emerged from left diagonal downward position in the direction of movement of the Aircraft and collided with the left wing leading edge with no time to avoid the collision. Airspeed and altitude of the Aircraft at the time of the collision were around 60 kt and 50 ft or less, respectively.

The Aircraft suspended the training and the captain took over the control from the trainee. The Aircraft landed on the airfield at 13:52.

(2) Damage to the Aircraft

Extent of the damage: Substantial damage (equivalent to major repair)

- Deformed outer skin of the left wing leading edge (dent of about 14 cm longitudinal direction, about 50 cm width and about 4 cm depth)
- Deformed rib of the left wing leading edge (inside of the deformed outer skin)



Figure 1: Damaged position of the accident aircraft
(The right figure shows inside of the left wing taken from wing tip side)

(3) Information on the Bird

The dead bird (falcon with overall length of about 50 cm and weight of about 1 kg) was found on the runway about 80 m ahead of the collision point.

According to the captain and the trainee, they did not sight the bird in the first round of the touch-and-go.

(4) Bird Strike Preventive Measures Taken at the Airfield

As the bird strike preventive measures at the airfield, bird sweep was implemented using a vehicle horn, if birds were sighted near the runway.

3. ANALYSIS

It is certain that the Aircraft collided with the bird immediately after the take off during touch-and-go training and sustained damage to the structure.

It is probable that the trainee noticed the bird approaching from left diagonal downward direction; however, it was difficult for him to avoid the bird due to very limited time before the collision.

4. PROBABLE CAUSES

In this accident, it is certain that the structure was damaged because the Aircraft collided with the bird immediately after the take off.