AIRCRAFT ACCIDENT INVESTIGATION REPORT



April 04, 2025

Adopted by the Japan Transport Safety BoardChairpersonRINOIE KenichiMemberTAKANO ShigeruMemberMARUI YuichiMemberSODA HisakoMemberTSUDA HirokaMemberMATSUI Yuko

Company	Oriental Air Bridge Co., Ltd.		
Туре,	Bombardier DHC-8-402, JA858A		
Registration			
Mark			
Accident Class	Aircraft damage caused by a bird strike		
Date and Time	At about 08:11 Japan Standard Time (JST: UTC+9 hours), July 20, 2024		
of the			
Occurrence			
Site of the	Tsushima Airport, Tsushima City, Nagasaki Prefecture		
Accident	(34° 17' 05" N, 129° 19' 50" E)		

1. PROCESS AND PROGRESS OF THE ACCIDENT INVESTIGATION

Summary	of	the	On Saturday, July 20, 2024, the aircraft sustained damage due to bird	
Accident			strike while landing at Tsushima Airport on a scheduled Flight ORC79. There	
			were 40 people on board, consisting of captain (PIC), three other crew members	
			and 36 passengers. No one was injured.	
Outline o	of	the	On July 22, 2024, the Japan Transport Safety Board (JTSB) designated	
Accident			an investigator-in-charge and an investigator to investigate this accident. In	
Investigation			addition, another investigator was assigned on July 26, 2024.	
			An accredited representative and an adviser of Canada, as the State of	
			Design and Manufacture of the aircraft involved in this accident, participated	
			in the investigation.	
			Comments on the draft Final Report were invited from the parties	
			relevant to the cause of the accident and Relevant State.	

2. FACTUAL INFORMATION

Aircraft Information

Aircraft Type: Bombardier DHC-8-402

Serial Number: 4385 Date of Manufacture: October 4, 2011

Airworthiness Certificate: No. Tou-24-328

Validity: During the period from October 11, 2012, in which the aircraft is maintained in accordance with Maintenance Manual (All Nippon Airways Co., Ltd.).

Personnel Information

Captain: Age 67

Airline transport pilot certificate (Airplane)	April 9, 1998
Type Rating for Bombardier DHC-8	June 17, 2022
Class 1 Aviation Medical Certificate	Validity: August 14, 2024

Meteorological Information

Weather Observation of Tsushima Airport around the time of the accident were as follows:

08:00 Wind direction 240°; Wind velocity 7kt; Maximum wind velocity 19kt,

Wind direction variable 170°-290°, Visibility: more than 10km

Event Occurred and Relevant Information

(1) History of the Flight

At 07:47, the aircraft took off from Fukuoka Airport as the company's scheduled flight 79, with the Captain in the left pilot seat and the First Officer (FO) in the right. At 08:11, the aircraft landed on Runway 32 of Tsushima Airport, during its landing roll, near Taxiway T-2, a bird at the right of the runway took off. The Captain and the FO noticed but before they could react, the bird struck the right propeller. The aircraft airspeed at the time of the bird strike was about 75 kt.

(2) Damage to the Aircraft

Extent of Damage: Substantial (required major repair)

- A dent on the right fuselage 14.5cm wide, 13.0cm long and 0.5cm depth between stringers 12S and 13S (inside the ice shield^{*1}) near X258.50 frame.
- Damage including cracks on the ice shield which covers the dent described above.
- About 8cm missing from the right propeller of Blade #2 tip.
- There were Bloodstains of the bird on the ice shield and its vicinity and the right propeller #2 Blade tip.



^{*1 &}quot;Ice Shields" are the protection plates made of aramid fiber reinforced plastic composite material installed on both sides of the fuselage at the plane of the propellers to protect damage due to the impact of ice thrown from the propellers.

(3) Information on the Bird

The remains of the bird (black kite, about 40cm in length, weighing about 1kg) struck with the aircraft was generally broken into three pieces and found on the runway near the point of impact.

(4) Bird Strike Preventative Measures at the Airport

At the airport, bird sweep patrol using firearms and fireworks has been conducted on every scheduled flight from 30 to 5 minutes prior to land and up to engine start for departures so as the accident day.

3. ANALYSIS

The JTSB concludes that it is certain that the bird struck the right propeller during the landing roll and the bird was accelerated by the propeller rotation and struck the fuselage and caused damage to the aircraft.

Although the captain noticed the bird on the right of the runway taking off, it was probably difficult to avoid the bird as the aircraft was in its landing roll.

4. PROBABLE CAUSES

The JTSB concludes that the probable cause of this accident was that it is certain that the aircraft had a bird strike during the landing roll, which resulted in damage to the aircraft.