

# AIRCRAFT SERIOUS INCIDENT INVESTIGATION REPORT



January 15, 2026

Adopted by the Japan Transport Safety Board

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 Member TAKANO Shigeru  
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 Member TSUDA Hiroka  
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<b>Company</b>	Privately owned
<b>Type, Registration Mark</b>	PIPER PA-28RT-201T, JA4128
<b>Incident Class</b>	Dragging during landing of any other part of the aircraft other than the landing gears Item (iii), Article 166-4 of the Regulation for Enforcement of the Civil Aeronautics Act
<b>Date and Time of the Occurrence</b>	At about 12:46 Japan Standard Time (JST: UTC+9 hours), March 20, 2025
<b>Site of the Serious Incident</b>	Oshima Airport, Tokyo Metropolis (34° 47' 12" N, 139° 21' 44" E)

## 1. PROCESS AND PROGRESS OF THE SERIOUS INCIDENT INVESTIGATION

<b>Summary of the Serious Incident</b>	<p>On Thursday, March 20, 2025, the aircraft made a belly landing, with its propeller, the fuselage underside and others coming into contact with the runway surface when landing on Runway 21 at the airport.</p> <p>The pilot and a passenger were on board the aircraft, and neither sustained any injuries. The aircraft was damaged in the propeller and lower fuselage areas, but there was no outbreak of fire.</p>
<b>Outline of the Serious Incident Investigation</b>	<p>On Thursday, March 20, 2025, the Japan Transport Safety Board (JTSB) designated an investigator-in-charge and an investigator.</p> <p>Comments on the draft Final Report were invited from parties relevant to the cause of the serious incident and the Relevant State.</p>

## 2. FACTUAL INFORMATION

<b>Aircraft Information</b>	
Aircraft type :	Piper PA-28RT-201T
Serial number: 28R-7931260	Date of manufacture: June 29, 1979
Airworthiness certificate: No. Tou-2024-355	Validity: December 5, 2025
<b>Personnel Information</b>	
Pilot: Age 75	

Commercial pilot certificate (Airplane)	January 14, 1976
Ratings and limitations: Rating for single-engine (land)	May 2, 1974
Pilot competency assessment	
Expiration date of piloting capable period:	October 19, 2026
Class 1 aviation medical certificate	Validity: December 4, 2025
Total flight time	435 hours 30 minutes
Flight time in the last 30 days	1 hour 39 minutes
Total flight time on the type of aircraft	5 hours 49 minutes (Number of flights: 7)
Flight time in the last 30 days	1 hour 39 minutes
Passenger: Age 98	
Private pilot certificate (Airplane)	November 26, 1976
Ratings and limitations: Rating for single-engine (land)	November 26, 1976
Pilot competency assessment	None
Aviation medical certificate	None
Total flight time (based on the Passenger's statement)	about 3,400 hours
Total flight time on the type of aircraft (based on the Passenger's statement)	about 1,500 hours

#### **Meteorological Information**

The weather observations for the wind direction and velocity at the airport around the time of this serious incident were as follows:

12:00 Wind direction: 240°, Wind velocity: 10 kt, Wind direction fluctuation: 210° - 280°

12:50 Wind direction: 230°, Wind velocity: 13 kt, Wind direction fluctuation: 210° - 280°

#### **Event Occurred and Relevant Information**

##### **(1) History of the Flight**

The aircraft was flying by the pilot's control toward the airport with visual flight rules for the purpose of familiarization flight, with the pilot in the left pilot seat and the passenger in the right pilot seat. The aircraft was flying from the northwest to the airport operated with Runway 21. As there were no other aircraft taking off or landing, the pilot decided to join the traffic pattern from the base leg and began to approach the airport.

After turning the aircraft onto the final approach, the pilot extended the flaps by one notch, but did not perform the landing gear down operation and continued the approach. At 12:46, the aircraft landed with its landing gear retracted, resulting in a belly landing. It then skidded, with its fuselage underside in contact with the runway surface before coming to a halt on the runway.

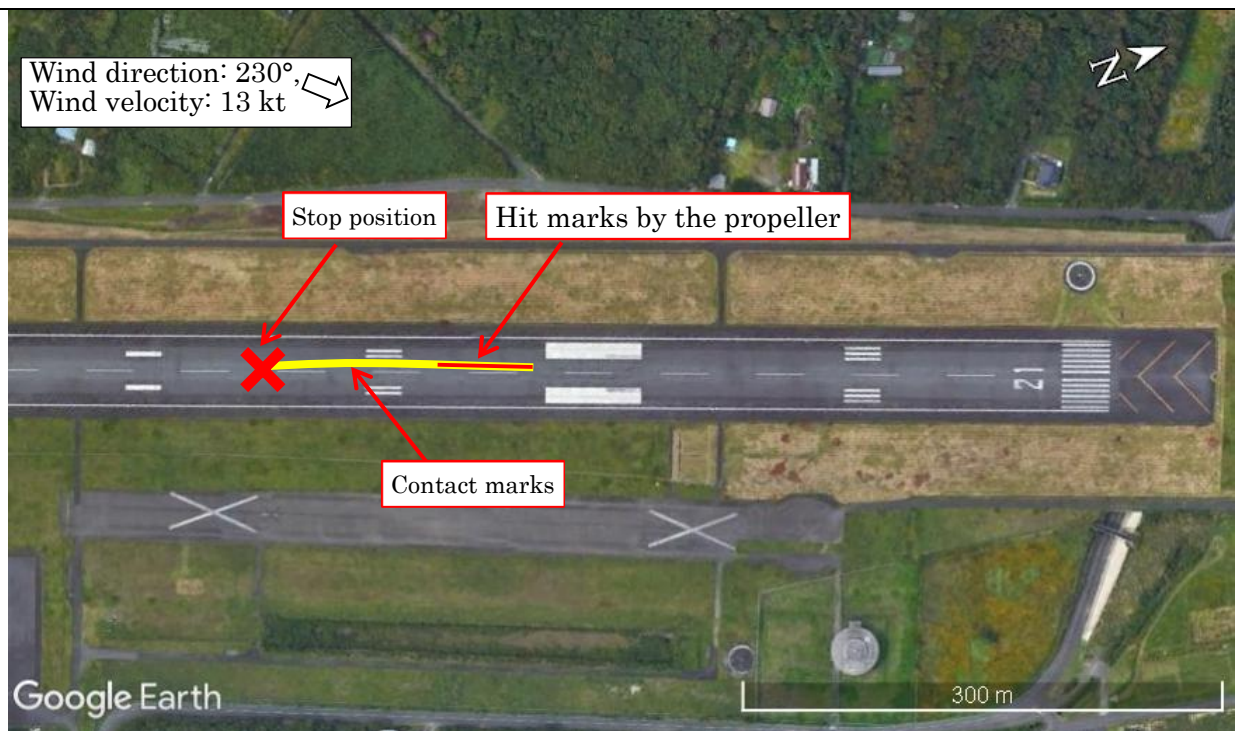


Figure 1: Estimated Skidding Route

(2) Information on the Aircraft

a. Damage to the aircraft

Minor damage: Propeller blades (three blades) were damaged, and the abrasion marks seen in the underside of the fuselage.

b. Landing gear warning system

The aircraft is equipped with a retractable landing gear powered by a hydraulic power system. When the landing gear is not down and locked, and the throttle lever is pulled back beyond the position corresponding to an engine intake manifold pressure of 14 inHg, the warning horn (intermittent sound) is activated and the warning light located on the instrument panel illuminates.

The examination of the aircraft conducted after the serious incident confirmed that the landing gear warning system, including its horn and light, could function normally according to the position of the throttle lever.

As the warning systems that emit a warning sound, the aircraft is equipped with a stall warning system in addition to the landing gear warning system. The stall warning horn emits a warning sound (continuous sound) only, but no visual warning indication.



Figure 2: Landing Gear Warning Light (Illuminated State)

c. Normal procedures before landing

The Pilot's Operating Handbook of the aircraft prescribes that the normal procedures before landing, landing gear down operation shall be performed prior to flap operation.

(3) Statements of the Pilot

- a. The pilot had experience of flying an airplane equipped with retractable landing gear but had not flown since 1996. Since returning to flying in 2010, the pilot has only flown aircraft equipped with fixed landing gear.
- b. At the passenger's request, the pilot began flying the aircraft last year. When flying the aircraft for the first time, the pilot received instructions on how to operate it, among other things. The pilot then flew the aircraft while receiving advice as required from the passenger, who had experience of flying the same aircraft type on board each time.
- c. So far, the pilot had neither heard the landing gear or stall warning sounds on the aircraft, nor seen the warning light illuminate during flight.
- d. Until now, whenever landing the aircraft, the pilot had always flown on the downwind leg, performing the landing gear down operation when passing abeam the center of the runway. However, on this flight, the pilot joined the traffic pattern from the base leg for the first time on the aircraft and forgot to perform the landing gear down operation.
- e. After turning the aircraft onto the final approach, the pilot extended the flaps by one notch. However, due to operating below the normal approach path and slight turbulence at this time, the pilot became preoccupied with adjusting the approach angle and others. As the pilot did not have the habit of reconfirming the gear down status with the gear position indicators before landing, the pilot did not notice that the landing gear had not been extended before making a belly landing.
- f. Immediately before the landing (the above ground level (AGL) altitude about 3 m), the pilot noticed that the warning light on the instrument panel had illuminated, but thought that it was a stall warning and continued the landing, maintaining an airspeed of between 70 and 75 kt. At this time, the pilot neither recognized the sound of the warning horn nor knew when the warning light had illuminated.
- g. While on the ground, the pilot used to operate procedures while consulting the checklist to confirm them on a routine basis, however, during the flight, the pilot performed the procedures only from memory without referring to the checklist. The pilot did not use the checklist at this flight either.

(4) Passenger

At the owner's request, the passenger was responsible for managing the aircraft. However, as the passenger had retired from flying, the passenger would ask the pilot for help whenever flying the aircraft.

According to the statement of the passenger, the passenger became concerned about the aircraft's low altitude while on final approach, during the approach at the time of the serious incident. The passenger therefore advised the pilot to correct the approach angle and then concentrated on monitoring the pilot's correction, which caused the passenger to fail to notice that the landing gear had not been extended.

(5) Use of Checklist

Checklists are widely used by pilots to prevent omission error in critical flight procedures, regardless of their experience and proficiency with aircraft.

In addition, the importance of using checklists is also emphasized in other JTSA reports on

similar serious incidents (Report No. AI2025-2-2, Report No. AI2025-7-2 and others).

### 3. ANALYSIS

#### (1) Forgetting to perform the landing gear down operation

The JTTSB concludes as follows:

On previous flights with the aircraft, the pilot had always flown on the downwind leg and performed the landing gear down operation when passing abeam the center of the runway. However, during the flight involving the serious incident, the pilot joined the traffic pattern from the base leg without flying the downwind leg, and it most likely caused to that the pilot no longer had any trigger to remind the pilot to lower the landing gear and forgot to perform it. After that, the pilot performed the flap operations on the final approach and proceeded with the before landing procedures, therefore, it is highly probable that the pilot did not come up with the landing gear down operation after performing the flap operations and continued the approach. Besides, given that the pilot had only flown aircraft equipped with fixed landing gear since returning to flying in 2010, it is probable that the pilot had not properly mastered the landing gear down operation as a procedure, which contributed to the pilot's forgetting to perform it.

It is most likely that immediately before the landing, the pilot noticed that the warning light had illuminated, but did not understand its meaning correctly, therefore, the pilot did not realize that the landing gear was not extended and continued the landing, resulting in the aircraft belly-landing, with its propeller, the fuselage underside and others contacting with the runway surface.

In addition, the examination of the aircraft revealed no anomalies in the landing gear warning system, therefore, it is most likely that the warning horn sounded at the same time as the landing gear warning light came on before landing. However, as the pilot was concentrating on landing, the pilot probably did not realize that the warning horn had sounded.

#### (2) Confirmation of Various Operations during Flight

The JTTSB concludes that during the flight, the pilot did not have the habit of using the checklists and performed various operations only from memory, therefore, there was no opportunity for the pilot to realize that the landing gear down operation had been forgotten and it is most likely that the pilot did not notice that the landing gear had not been extended until the belly landing because the pilot did not properly understand the meaning of the landing gear warning light.

As stated by the JTTSB in the report on the similar serious incident (Report No. AI2025-7-2), humans are not able to conduct several tasks at the same time, and it is difficult to eliminate oversights or misunderstandings, therefore, important operational checks for a flight should be carried out by using the checklists. In addition, it is also effective to make it standard practice to perform a final check to ensure that the landing gear and flaps are in the landing configuration before landing in order to prevent unforeseen circumstances caused by omission error in flight operations.

#### (3) Understanding of the Warning Functions

The JTTSB concludes that it is certain that the pilot had misidentified the landing gear warning light for a stall warning and did not have a sufficient understanding of the aircraft's various warning functions.

Aircraft warnings alert pilots to situations that require an immediate response, thus, it is essential that pilots have a thorough understanding of the various warning functions of aircraft in order to correctly recognize the situation immediately. Therefore, it is important that pilots should expand their knowledge by studying Pilot's Operating Handbook and others, become thoroughly

proficient in aircraft specifications — including aural and visual warnings —, performance, and flight characteristics through air work training, and familiarize themselves with their own aircraft.

#### **4. PROBABLE CAUSES**

The JTSA concludes that the probable cause of this serious incident was that it is most likely that the pilot forgot to perform the landing gear down operation, continued the approach without noticing that the landing gear had not been extended, resulting in the aircraft belly-landing, with its propeller, the fuselage underside and others contacting with the runway surface.

#### **5. SAFETY ACTIONS**

##### Safety Actions Required

##### (1) Use of Checklists

Checklists are a preventive measure that prevents omission error in critical flight procedures, regardless of the pilot's experience and proficiency with aircraft. Checklists should be always used, both on the ground and during flight.

##### (2) Understanding of the Warning Functions

In order to correctly recognize the situation at once, it is important that pilots have a thorough understanding of the various warning functions of aircraft, become thoroughly proficient in aircraft specifications, performance, and flight characteristics, and familiarize themselves with their own aircraft.