



Transportation
Safety Board
of Canada

Bureau de la sécurité
des transports
du Canada



AIR TRANSPORTATION SAFETY INVESTIGATION REPORT A23P0039

COLLISION WITH VEHICLE AND TERRAIN

Privately registered
Cessna 182P, C-GIDY
Langley Regional Airport, British Columbia
02 May 2023

The Transportation Safety Board of Canada (TSB) investigated this occurrence for the purpose of advancing transportation safety. It is not the function of the Board to assign fault or determine civil or criminal liability. **This report is not created for use in the context of legal, disciplinary or other proceedings.** See the Terms of use at the end of the report.

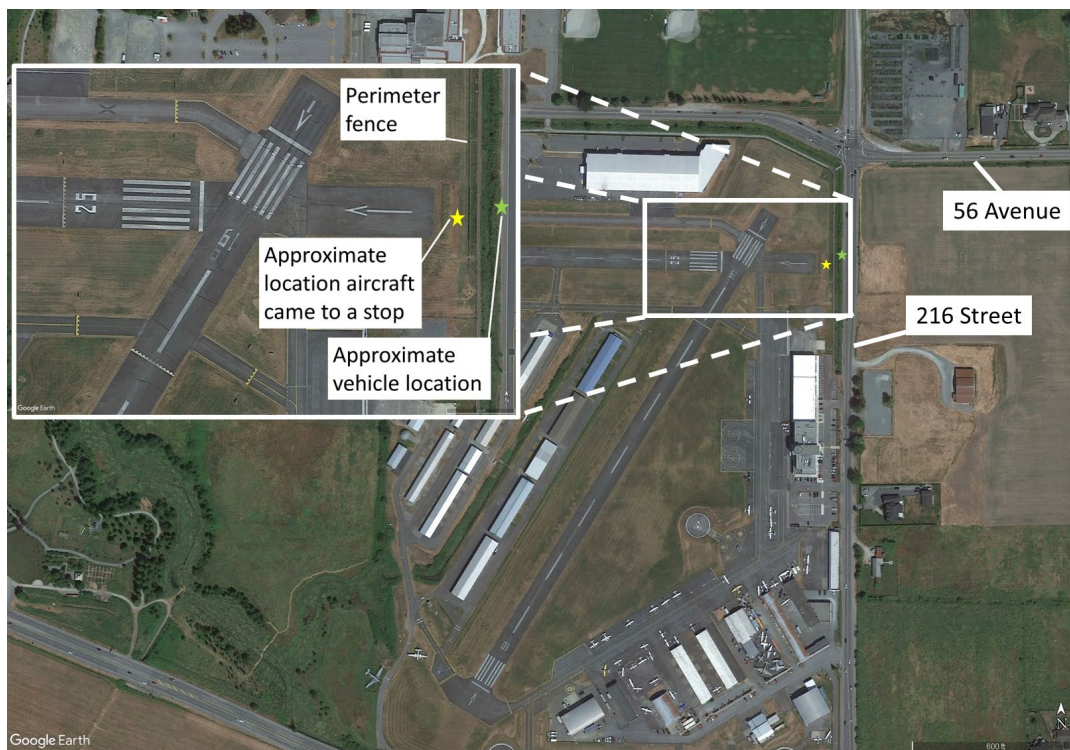
History of the flight

On 02 May 2023, the privately registered Cessna 182P (registration C-GIDY, serial number 18261845) was conducting a visual flight rules sightseeing flight from Langley Regional Airport (CYNJ), British Columbia, with the pilot and 1 passenger on board. On return to CYNJ, the pilot conducted a straight-in approach to Runway 25. At approximately 1502,¹ the aircraft was observed to be low on the approach. Shortly after, the aircraft struck a pickup truck that was driving on 216 Street, a public road, approximately 450 feet east of the runway's displaced threshold. It then struck the airport perimeter fence approximately 60 feet west of the initial impact with the pickup truck and slid a further 30 feet before it came to rest against a berm (Figure 1). A post-impact fire started shortly after. The passenger was able to exit the aircraft unassisted, and a bystander helped the pilot out of the aircraft. The pilot received serious injuries and the passenger received minor injuries; both were airlifted to hospital. The driver of the pickup

¹ All times are Pacific Daylight Time (Coordinated Universal Time minus 7 hours).

truck received minor injuries and was taken to hospital via ground ambulance. Firefighters extinguished the aircraft fire and the associated grass fire; the aircraft was destroyed.

Figure 1. Map showing the occurrence location, with close-up view in inset (Source of main image and inset: Google Earth, with TSB annotations)



Wreckage and impact information

Based on video and photographic evidence of the accident, as well as examination of the site, the aircraft was aligned with the runway centreline before it struck the pickup truck. After the impact with the truck and the airport perimeter fence, the aircraft pivoted 90° to the right and impacted the berm. It was destroyed in the post-impact fire (Figure 2). All major components of the aircraft were accounted for at the accident site.

Figure 2. Occurrence aircraft wreckage after the post-impact fire (Source: TSB)



There was significant damage to the pickup truck (Figure 3), the airport fence, and the surrounding grassy area, adjacent to the runway.

Figure 3. Pickup truck damaged by the occurrence aircraft (Source: TSB)



Pilot information

The pilot held a private pilot licence, which was the appropriate licence for the flight in accordance with regulations.

According to information gathered during the investigation, there was no indication that the pilot's performance was affected by medical or physiological factors.

Aircraft information

The occurrence aircraft was manufactured in 1973. There were no recorded defects outstanding at the time of the occurrence. There was no indication that a component or system malfunction played a role in this occurrence.

Weather information

CYNJ issues an hourly limited weather information system (LWIS) report. The report issued at 1500, shortly before the occurrence, indicated the following:

- Winds from 270° true (T) at 8 knots, variable from 220°T to 290°T
- Temperature 23 °C, dew point 12 °C
- Altimeter setting 29.67 inches of mercury (inHg)

The nearest airport issuing a full aerodrome routine meteorological report was Abbotsford Airport (CYXX), British Columbia. The report issued at 1500 indicated the following:

- Winds from 310°T at 5 knots, variable from 250°T to 360°T
- Visibility of 30 statute miles
- Few clouds at 24 000 feet above ground level
- Temperature 24 °C, dew point 13 °C

- Altimeter setting 29.66 inHg

Weather was not considered to be a factor in this occurrence.

Aerodrome information

Runway 25 at CYNJ is 75 feet wide, 2743 feet long, and has a displaced threshold of 343 feet. The runway is not equipped with any approach path guidance such as a visual approach slope indicator system.

If a pilot is conducting an approach on a standard 3° approach slope and aiming for the displaced threshold of Runway 25, the aircraft will be at an approximate height of 40 feet when it flies over 216 Street. If, however, the pilot is on the same approach slope, but aiming for the beginning of the runway, the aircraft will be at an approximate height of 10 feet when it flies over the street.

Survival aspects

The aircraft had been upgraded with 4-point restraints for both the pilot and the passenger. The additional protection offered by this type of restraint may have limited the injuries to both individuals.

The passenger was able to exit the aircraft unassisted but was unable to get the pilot out. Because the post-impact fire started soon after the impact, the passerby's assistance with getting the pilot out of the aircraft likely prevented more serious injuries.

Safety message

Runway thresholds are often displaced to ensure that the approach slope is clear of obstacles. Therefore, it is important that pilots aim to touch down beyond the displaced threshold to help maintain obstacle clearance.

This report concludes the Transportation Safety Board of Canada's investigation into this occurrence. The Board authorized the release of this report on 21 November 2023. It was officially released on 30 November 2023.

Visit the Transportation Safety Board of Canada's website (www.tsb.gc.ca) for information about the TSB and its products and services. You will also find the Watchlist, which identifies the key safety issues that need to be addressed to make Canada's transportation system even safer. In each case, the TSB has found that actions taken to date are inadequate, and that industry and regulators need to take additional concrete measures to eliminate the risks.

ABOUT THIS INVESTIGATION REPORT

This report is the result of an investigation into a class 4 occurrence. For more information, see the Policy on Occurrence Classification at www.tsb.gc.ca

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