



# **Aviation Investigation Final Report**

Location:	Bloomsburg, Pennsylvania	Accident Number:	ERA21LA268
Date & Time:	May 19, 2021, 11:00 Local	Registration:	N7568N
Aircraft:	Cessna T210	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

# Analysis

The pilot reported that during an aerial observation flight he finished the survey block and decided to land at an airport nearby to use the restroom and get fuel. He reported that he had never been to the airport, so he chose to enter the traffic pattern "a little high" as he noticed terrain around the airport. On final approach, the pilot executed a forward slip maneuver to reduce "excess airspeed and altitude" and once over the runway, he entered the landing flare, and the airplane floated down the runway about 500 ft. Subsequently, the airplane touched down nose first and entered a porpoise, which resulted in the collapse of the nose landing gear and a runway excursion through the end of the runway. The airplane sustained substantial damage to the fuselage and left wing.

The passenger on-board, who was the sensor operator, reported that while on short final approach, he observed the airspeed to be 125 knots, with a descent rate of 1,250 feet per minute, and the airplane subsequently touched down "halfway down" the runway. He then described that the airplane began to porpoise, and the pilot retracted the landing gear and applied full power, however the airplane "hit the ground" again and slid off the runway.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's unstable approach and delayed go-around attempt, which resulted in a porpoised landing, a nose landing gear collapse, and runway excursion.

Findings	
Personnel issues	Decision making/judgment - Pilot
Aircraft	Landing flare - Not attained/maintained
Personnel issues	Aircraft control - Pilot

# **Factual Information**

## History of Flight

Landing-flare/touchdown	Abnormal runway contact
Landing-flare/touchdown	Hard landing (Defining event)
Landing-landing roll	Runway excursion

# **Pilot Information**

Certificate:	Commercial	Age:	21,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	December 1, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 13, 2019
Flight Time:	867 hours (Total, all aircraft), 171 hours (Total, this make and model), 816 hours (Pilot In Command, all aircraft), 84 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

#### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7568N
Model/Series:	T210 N	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	21063235
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	January 8, 2021 Annual	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4070 Hrs	Engine Manufacturer:	Continental
ELT:	C126 installed, activated, aided in locating accident	Engine Model/Series:	TSIO-520-R9B
Registered Owner:	KEYSTONE AERIAL SURVEYS	Rated Power:	310 Horsepower
Operator:	KEYSTONE AERIAL SURVEYS	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	KIPT,520 ft msl	Distance from Accident Site:	27 Nautical Miles
Observation Time:	10:54 Local	Direction from Accident Site:	304°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.37 inches Hg	Temperature/Dew Point:	22°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Philadelphia, PA (PNE)	Type of Flight Plan Filed:	None
Destination:	Philadelphia, PA (PNE)	Type of Clearance:	VFR
Departure Time:	08:31 Local	Type of Airspace:	Class G

#### **Airport Information**

Airport:	BLOOMSBURG MUNI N13	Runway Surface Type:	Asphalt
Airport Elevation:	481 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	09/27	IFR Approach:	None
Runway Length/Width:	3200 ft / 60 ft	VFR Approach/Landing:	Full stop;Traffic pattern

#### Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	40.998553,-76.428836(est)

#### **Preventing Similar Accidents**

Manage Risk: Good Decision-making and Risk Management Practices are Critical (SA-023)

#### The Problem

Although few pilots knowingly accept severe risks, accidents can also result when several risks of marginal severity are not identified or are ineffectively managed by the pilot and compound into a dangerous situation. Accidents also result when the pilot does not accurately perceive situations that involve high levels of risk. Ineffective risk management or poor aeronautical decision-making can be associated with almost any type of fatal general aviation accident.

#### What can you do?

- Develop good decision-making practices that will allow you to identify personal attitudes that are hazardous to safe flying, apply behavior modification techniques, recognize and cope with stress, and effectively use all resources. Understand the safety hazards associated with human fatigue and strive to eliminate fatigue contributors in your life.
- Understand that effective risk management takes practice. It is a decision-making process by which you can systematically identify hazards, assess the degree of risk, and determine the best course of action.
- Be honest with yourself and your passengers about your skill level and proficiency. Refuse to allow external pressures, such as the desire to save time or money or the fear of disappointing passengers, to influence you to attempt or continue a flight in conditions in which you are not comfortable.
- Be honest with yourself and the FAA about your medical condition. If you have a medical condition or are taking any medication, do not fly until your fitness for flight has been thoroughly evaluated.
- Plan ahead with flight diversion or cancellation alternatives, and brief your passengers about the alternatives before the flight.

See <u>https://www.ntsb.gov/Advocacy/safety-alerts/Documents/SA-023.pdf</u> for additional resources.

The NTSB presents this information to prevent recurrence of similar accidents. Note that this should not be considered guidance from the regulator, nor does this supersede existing FAA Regulations (FARs).

#### **Administrative Information**

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Robert Pickard; FAA/ FSDO; Rochester, NY
Original Publish Date:	February 18, 2022
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=103340

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available <u>here</u>.