



# **Aviation Investigation Final Report**

Location: GROVE CITY, Pennsylvania Accident Number: NYC00LA043

Date & Time: November 28, 1999, 10:00 Local Registration: N89F

Aircraft: Stinson 108 Aircraft Damage: Substantial

**Defining Event:** 2 Minor

Flight Conducted Under: Part 91: General aviation - Instructional

### **Analysis**

During the landing rollout, the flight instructor said, 'I got it' and the student pilot relinquished the flight controls to him. The airplane then 'sharply, and suddenly' veered off the left side of the runway, impacted the opposite side of a ravine, and came to rest 200 feet from the centerline of the runway. There were no brake pedals on the right side of the airplane, and the parking brake knob was located on the 'far left panel.' Examination of the airplane revealed no pre-impact mechanical deficiencies. The flight instructor reported 400 hours of total tailwheel experience, 5 hours of which were in the make and model of the accident airplane. The student pilot reported 3 hours of total flight experience, all of which were in the accident airplane.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's failure to maintain control of the airplane during the landing rollout.

#### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

**Findings** 

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: LANDING - ROLL

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#### **Factual Information**

On November 28, 1999, about 1000 Eastern Standard Time, a Stinson 108, N89F, was substantially damaged during landing at the Grove City Airport (29D), Grove City, Pennsylvania. The certificated flight instructor (CFI) and student pilot/owner received minor injuries. Visual meteorological conditions prevailed and no flight plan was filed for the instructional flight conducted under 14 CFR Part 91.

The CFI stated that he and the student pilot departed 29D about 0900, for a "local training flight." An hour later they returned to the airport to make a full stop landing on Runway 28, a 4,500 foot long, 75 foot wide asphalt runway. According to the CFI, "there was no apparent cross wind drift" and the student pilot was "tracking well on the approach." At the point of touchdown, the airplane "sharply, and suddenly veered to the left." The CFI stated that they then lost directional control of the airplane. The airplane traveled off the side of the runway, impacted the opposite side of a 15 foot deep ravine, and came to rest 200 feet from the centerline. The CFI reported there were no brake pedals on the right side of the airplane, and the parking brake knob was located on the "far left panel," which was blocked by the student pilot.

The student pilot reported that this was his second flight in the accident airplane. He stated that he and the CFI had flown for about an hour when they returned to the airport for a full-stop landing. The student pilot reported there was "little wind" on the day of the accident, and his landing on Runway 28 was "perfect." During the landing rollout, the CFI said, "I got it" and the student pilot then relinquished the controls to him. Immediately after the CFI took over, the airplane veered off the runway and impacted a ditch, at 40-50 mph.

A Federal Aviation Administration (FAA) Inspector examined the airplane while it was in the ravine. He stated the fuselage and instrument panel were buckled, one propeller blade was bent backwards 45 degrees, and the engine mounts and firewall were damaged. The FAA Inspector further examined the airplane after it was removed from the ravine, and reported no pre-impact mechanical deficiencies.

The CFI reported 2,113 hours of total flight experience, and about 400 hours of total tailwheel experience, 5 hours of which were in the make and model of the accident airplane. The student pilot reported 3 hours of total flight experience, all of which were in the accident airplane.

The winds at an airport 19 miles away, at 0955, were from 260 degrees at 4 knots.

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#### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	53,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 4, 1999
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	2100 hours (Total, all aircraft), 5 hours (Total, this make and model), 2070 hours (Pilot In Command, all aircraft), 210 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Stinson	Registration:	N89F
Model/Series:	108 108	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	108-1549
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2078 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Franklin
ELT:	Installed, not activated	Engine Model/Series:	6A4150
Registered Owner:	GEORGE RIEDER	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FKL ,1540 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	09:55 Local	Direction from Accident Site:	30°
<b>Lowest Cloud Condition:</b>	Unknown	Visibility	10 miles
Lowest Ceiling:	Overcast / 3200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	3°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(29D)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	Class G

### **Airport Information**

Airport:	GROVE CITY AIRPORT 29D	Runway Surface Type:	Asphalt
Airport Elevation:	1371 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	4500 ft / 75 ft	VFR Approach/Landing:	Full stop

## Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	41.150138,-80.079879(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Hancock, Robert

Additional Participating Persons:

Original Publish Date: December 4, 2000

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=47841

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 here.

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