



Aviation Investigation Final Report

Location:	Tok, Alaska	Accident Number:	ANC22LA079
Date & Time:	September 18, 2022, 13:00 Local	Registration:	N92740
Aircraft:	Piper PA-12	Aircraft Damage:	Substantial
Defining Event:	Nose over/nose down	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, during the landing roll on a gravel bar, she applied the brakes to slow the airplane, but felt an “unusual amount of forward momentum.” She pulled back on the stick, however, the airplane nosed over and came to rest inverted, which resulted in substantial damage to the rudder and wings. The pilot reported no preimpact mechanical malfunctions or failures 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 improper application of the brakes, which resulted in a nose-over and substantial damage to the rudder and wings.

Findings

Aircraft	Brake - Incorrect use/operation
Personnel issues	Incorrect action performance - Pilot

Factual Information

History of Flight

Landing-landing roll	Nose over/nose down (Defining event)
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Pilot Information

Certificate:	Commercial	Age:	25,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
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 Without waivers/limitations	Last FAA Medical Exam:	June 13, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 10, 2022
Flight Time:	376.9 hours (Total, all aircraft), 160.8 hours (Total, this make and model), 317.6 hours (Pilot In Command, all aircraft), 53.7 hours (Last 90 days, all aircraft), 19.7 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N92740
Model/Series:	PA-12	Aircraft Category:	Airplane
Year of Manufacture:	1946	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	12-177
Landing Gear Type:	Tailwheel	Seats:	3
Date/Type of Last Inspection:	September 16, 2022 Annual	Certified Max Gross Wt.:	1750 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1483.39 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	On file	Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	CYXQ,2129 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	13:00 Local	Direction from Accident Site:	33°
Lowest Cloud Condition:	Few / 3500 ft AGL	Visibility	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	10°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Tok, AK (PTFO)	Type of Flight Plan Filed:	None
Destination:	Tok, AK	Type of Clearance:	None
Departure Time:	12:50 Local	Type of Airspace:	Class G

Airport Information

Airport:	Gravel Bar None	Runway Surface Type:	
Airport Elevation:	3276 ft msl	Runway Surface Condition:	Rough
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	62.236555,-141.11793(est)

Administrative Information

Investigator In Charge (IIC):	Kemner, Heidi
Additional Participating Persons:	Bradley Sapp; FAA/FSDO; Anchorage, AK
Original Publish Date:	December 15, 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=105991

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](#).