



# Aviation Investigation Final Report

<b>Location:</b>	Nenana, Alaska	<b>Accident Number:</b>	ANC07LA055
<b>Date &amp; Time:</b>	June 24, 2007, 15:30 Local	<b>Registration:</b>	N5540A
<b>Aircraft:</b>	Piper PA-20	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The private certificated pilot was conducting a personal local flight under Title 14, CFR Part 91, when the accident occurred. The pilot reported that during landing, the airplane touched down on the runway centerline, and veered sharply to the right. He applied left rudder and power, but the airplane continued to the right, and ground-looped. The left main landing gear collapsed, and the left wing struck the ground. The pilot said there were no known mechanical anomalies with the airplane prior to the accident, and that the left wing and left horizontal stabilizer, were damaged during the accident. The pilot reported that faster reactions after touchdown might have prevented the accident.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain directional control during landing, which resulted in a ground-loop and main landing gear collapse. Factors contributing to the accident were the ground-loop and landing gear collapse.

## Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

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

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Occurrence #2: GEAR COLLAPSED  
Phase of Operation: LANDING - ROLL

Findings

2. (F) LANDING GEAR,MAIN GEAR - COLLAPSED
3. (F) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

## Factual Information

On June 24, 2007, about 1530 Alaska daylight time, a tailwheel-equipped Piper PA-20 airplane, N5540A, sustained substantial damage during landing at the Nenana Municipal Airport, Nenana, Alaska. The airplane was being operated by the pilot as a visual flight rules (VFR) personal local flight under Title 14, CFR Part 91, when the accident occurred. The pilot and sole passenger were not injured. Visual meteorological conditions prevailed, and no flight plan was filed. The flight departed the Fairbanks International Airport, Fairbanks, Alaska, about 1445.

In a written statement to the NTSB dated July 10, the pilot reported that when he reached the destination airport, the airplane touched down on the runway centerline, and veered sharply to the right. He indicated that he applied left rudder and power, but the airplane continued to the right, and ground-looped. According to the pilot, the left main landing gear collapsed, and the left wing struck the ground. He reported that there were no known mechanical anomalies with the airplane prior to the accident, and that the left wing, and left horizontal stabilizer, were damaged during the accident. The pilot wrote that faster reactions after touchdown might have prevented the accident.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	46, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	February 1, 2007
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	April 1, 2007
<b>Flight Time:</b>	110 hours (Total, all aircraft), 6 hours (Total, this make and model), 50 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N5540A
<b>Model/Series:</b>	PA-20	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	20-982
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	January 1, 2007 Annual	<b>Certified Max Gross Wt.:</b>	1950 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2648 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320
<b>Registered Owner:</b>	Westley Rice	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	Wayne Brown	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	21°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Fairbanks (PAFA)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Nenana, AK (PANN)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:45 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Nenana PANN	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	420 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	34	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4600 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	64.547225,-149.073883

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Lewis, Lawrence
<b>Additional Participating Persons:</b>	Christopher Farnell; Fairbanks, FSDO-01; Fairbanks, AK
<b>Original Publish Date:</b>	November 29, 2007
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=66251">https://data.nts.gov/Docket?ProjectID=66251</a>

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