



Aviation Investigation Final Report

Location:	PALMER, Alaska	Accident Number:	ANC03LA047
Date & Time:	April 23, 2003, 13:30 Local	Registration:	N5589H
Aircraft:	Piper PA-20	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The commercial certificated pilot was landing a tundra tire-equipped airplane on an asphalt surface runway that was 3,616 feet long and 75 feet wide. The pilot said that during the landing roll, the airplane began to veer left and right, and he added engine power to control the airplane. The pilot indicated that the airplane departed off the runway surface to the right, and then ground looped to the right. The left main landing gear collapsed inward and upward, and the left wingtip struck the ground. The airplane received damage to the left landing gear and fuselage structure, the left wing lift strut, and left wingtip. The pilot reported the wind was from the south-southwest at 5 knots.

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 of the airplane during the landing roll which resulted in an inadvertent ground loop and collapse of the left main landing gear.

Findings

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

Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

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

Findings

3. LANDING GEAR,MAIN GEAR - OVERLOAD

Factual Information

On April 23, 2003, about 1330 Alaska daylight time, a tundra tire-equipped Piper PA-20 airplane, N5589H, sustained substantial damage when it departed off the right side of the runway and ground looped during the landing roll at the Palmer Municipal Airport, Palmer, Alaska. The airplane was being operated as a visual flight rules (VFR) local area personal flight under Title 14, CFR Part 91, when the accident occurred. The airplane was operated by the pilot/owner. The commercial certificated pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed. The flight originated at the Birchwood Airport, Chugiak, Alaska, at 1315. No flight plan was filed, nor was one required.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on April 23, the pilot reported that he was landing on runway 27 at the Palmer Airport. Runway 27 has an asphalt surface and is 3,616 feet long and 75 feet wide. The pilot said that during the landing roll, the airplane began to veer left and right, and he added engine power to control the airplane. The pilot indicated that the airplane departed off the runway surface to the right, and then ground looped to the right. The left main landing gear collapsed inward and upward, and the left wingtip struck the ground. The airplane received damage to the left landing gear and fuselage structure, the left wing lift strut, and left wingtip.

The pilot reported the wind was from the south-southwest at 5 knots.

Pilot Information

Certificate:	Commercial	Age:	39, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical—no waivers/lim.	Last FAA Medical Exam:	July 20, 2002
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 31, 2002
Flight Time:	1280 hours (Total, all aircraft), 95 hours (Total, this make and model), 1180 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N5589H
Model/Series:	PA-20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20-651
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	August 26, 2002 Annual	Certified Max Gross Wt.:	1950 lbs
Time Since Last Inspection:	25 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	912 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	CRAIG E. WALTERS	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / 10 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CHUGIAK, AK (PABV)	Type of Flight Plan Filed:	None
Destination:	PALMER, AK (PAAQ)	Type of Clearance:	VFR
Departure Time:	13:15 Local	Type of Airspace:	Class E

Airport Information

Airport:	PALMER MUNICIPAL PAAQ	Runway Surface Type:	Asphalt
Airport Elevation:	248 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	3616 ft / 75 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	61.596111,-149.089172

Administrative Information

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	CRAIG JOHNSON; FAA-AL-ANC FSDO 03; ANCHORAGE, AK
Original Publish Date:	November 25, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=56873

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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](#).