



Aviation Investigation Final Report

Location:	DILLINGHAM, Alaska	Accident Number:	ANC00LA122
Date & Time:	September 13, 2000, 13:30 Local	Registration:	N8DG
Aircraft:	Piper PA-22	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot was landing a tailwheel-equipped airplane on a gravel airstrip. Shortly after touchdown, the airplane began to drift to the left of centerline. The pilot said he applied brakes and corrective action, however, the left brake locked-up and the airplane subsequently ground-looped.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A malfunctioning main landing gear brake, which precipitated a ground-loop.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING - ROLL

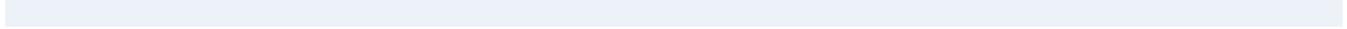
Findings

1. (C) LANDING GEAR,NORMAL BRAKE SYSTEM - MALFUNCTION

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

2. (C) GROUND LOOP/SWERVE



Factual Information

On September 13, 2000, about 1330 Alaska daylight time, a tailwheel-equipped Piper PA-22, N8DG, sustained substantial damage while landing at a private airstrip, about 4 miles west of Dillingham, Alaska, at 59 degrees, 3 minutes north latitude, 158 degrees, 34 minutes west longitude. The airplane is owned and operated by the pilot, and was being operated as a visual flight rules (VFR) personal/pleasure flight under the provisions of Title 14, CFR Part 91, when the accident occurred. The private pilot, and the one passenger were not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the local flight. The flight originated from the same airstrip.

During a telephone conversation with the NTSB investigator-in-charge (IIC) on September 13, 2000, the pilot reported that the airplane touched down in a three-point attitude on the eastbound gravel runway. He stated that shortly after touchdown the airplane began to drift to the left of centerline. The pilot applied brakes and corrective action, however, the airplane's left brake locked-up, and the airplane subsequently ground-looped.

The pilot reported that during the airplane's recovery, the left brake was still engaged, and the wheel assembly did not rotate.

The airplane sustained substantial damage to the right wing lift-strut, right wing, and elevator.

At 1354, Dillingham winds were from 10 degrees at 12 knots, gusting to 20 knots.

Pilot Information

Certificate:	Private	Age:	38, Male
Airplane Rating(s):	Single-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 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 25, 1997
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	460 hours (Total, all aircraft), 371 hours (Total, this make and model), 70 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N8DG
Model/Series:	PA-22 PA-22	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	27-7308
Landing Gear Type:	Tailwheel	Seats:	3
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360-A1A
Registered Owner:	MANUAL BRITO	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	DLG ,86 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	13:54 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	Scattered / 3600 ft AGL	Visibility	25 miles
Lowest Ceiling:	Broken / 14000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	11°C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:20 Local	Type of Airspace:	Class G

Airport Information

Airport:	SHANNON'S AIRSTRIP	Runway Surface Type:	Gravel
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	58.82048,-157.860641(est)

Administrative Information

Investigator In Charge (IIC):	Hogenson, Dennis
Additional Participating Persons:	JAMES P LEONARD; ANCHORAGE , AK
Original Publish Date:	July 10, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=50282

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](#).