



Aviation Investigation Final Report

Location:	KASILOF, Alaska	Accident Number:	ANC97LA006
Date & Time:	October 26, 1996, 14:00 Local	Registration:	N7431D
Aircraft:	Piper PA-22/20	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was conducting touch-and-go operations on a frozen lake adjacent to his property. A small frozen mound of dirt was located at the approach end of the lake. The pilot indicated that he was concerned about stopping on the frozen surface of the lake, and his approach path to the lake was a little low. The right main landing gear struck the mound of dirt before touchdown and was folded back against the fuselage. The airplane then contacted the surface of the lake and received damage to the right main landing gear, propeller, and the spar and outboard ribs of the right wing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's misjudgment of distance and altitude on final approach to land, which resulted in an undershoot and collision with a dirt bank before reaching the proper touchdown point. A factor related to the accident was: the proximity of the frozen dirt bank at the approach end of the intended point of landing.

Findings

Occurrence #1: UNDERSHOOT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

- Findings
1. (C) DISTANCE/ALTITUDE - MISJUDGED - PILOT IN COMMAND

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

Findings

2. (F) TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

Factual Information

On October 26, 1996, about 1400 Alaska daylight time, a wheel equipped Piper PA-22/20, N7431D, collided with terrain at a frozen lake near Kasilof, Alaska. The airplane was being operated as a visual flight rules (VFR) local area personal flight when the accident occurred. The airplane, registered to and operated by the pilot sustained substantial damage. The certificated private pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed.

On October 31, 1996, at 0900, the pilot reported in a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) that he was conducting touch and go operations on a frozen lake adjacent to his property. The lake is oriented on a north/south direction and he was landing toward the north. It is about 1,200 feet long and about 40 feet wide. A small frozen mound of dirt is located at the approach end of the lake. The pilot indicated that he was concerned about stopping on the frozen surface of the lake and his approach path to the lake was a little low. The right main landing gear struck the mound of dirt before touchdown and was folded back against the fuselage. The airplane then contacted the surface of the lake and received damage to the right main landing gear, propeller, and the spar and outboard ribs of the right wing.

Pilot Information

Certificate:	Private	Age:	44, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	June 26, 1995
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	173 hours (Total, all aircraft), 106 hours (Total, this make and model), 129 hours (Pilot In Command, all aircraft), 45 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7431D
Model/Series:	PA-22/20 PA-22/20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-5190
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	July 21, 1996 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	29 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2013 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	TOMMY J. HUDSON	Rated Power:	150 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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	70 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	-7°C / -14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Touch and go

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:	60.279666,-151.259445(est)

Administrative Information

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	MIR ALI; ANCHORAGE , AK
Original Publish Date:	March 31, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=2951

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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](#).