



# Aviation Investigation Final Report

<b>Location:</b>	GIRDWOOD, Alaska	<b>Accident Number:</b>	ANC89LA036
<b>Date &amp; Time:</b>	January 21, 1989, 16:00 Local	<b>Registration:</b>	N4280Z
<b>Aircraft:</b>	PIPER PA-18	<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 AIRLINE TRANSPORT PILOT LANDED UP-SLOPE ON A GLACIER AND WAS TURNING TO TAKEOFF DOWN-SLOPE WHEN TAILWIND AND 10-20 DEGREE SLOPE CAUSED THE AIRCRAFT TO TURN THROUGH THE DESIRED TAKEOFF HEADING, AND TO SLIDE SIDWAYS. THE RIGHT SKI DUG INTO THE SNOW, CAUSING THE RIGHT MAIN LANDING GEAR TO COLLAPSE, AND THE RIGHT WING TO CONTACT THE FROZEN SURFACE. THE CRASH SITE ELEVATION WAS ABOUT 4,400 FEET MSL.

## 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 CONTROL OF THE AIRPLANE WHILE ATTEMPTING TO TAKEOFF FROM A SLOPED TERRAIN THAT WAS TOO STEEP FOR A SAFE OPERATION. CONTRIBUTING TO THE ACCIDENT WAS THE DOWNHILL, ICY TERRAIN CONDITIONS AND THE PILOT'S OVERCONFIDENCE IN BOTH HIS AND THE AIRPLANE'S ABILITY..

## Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: TAXI - TO TAKEOFF

### Findings

1. (F) TERRAIN CONDITION - DOWNHILL
2. (F) TERRAIN CONDITION - ICY

3. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND
4. (F) OVERCONFIDENCE IN PERSONAL ABILITY - PILOT IN COMMAND
5. (F) OVERCONFIDENCE IN AIRCRAFT'S ABILITY - PILOT IN COMMAND

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Occurrence #2: GEAR COLLAPSED

Phase of Operation: TAXI - TO TAKEOFF

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Occurrence #3: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID

Phase of Operation: TAXI - TO TAKEOFF

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	45, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	January 17, 1989
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	21000 hours (Total, all aircraft), 300 hours (Total, this make and model), 20000 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N4280Z
<b>Model/Series:</b>	PA-18 PA-18	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	188528
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	May 14, 1988 Annual	<b>Certified Max Gross Wt.:</b>	1750 lbs
<b>Time Since Last Inspection:</b>	20 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5174 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320
<b>Registered Owner:</b>	MEJO DKON RUCKMAN	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	GERALD G. CHISUM	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## 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>	60 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	30°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	-9°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	GIRDWOOD , AK	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	None

## 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>	60.900436,-148.909088(est)

## Administrative Information

**Investigator In Charge (IIC):** Daw, Roy

**Additional Participating Persons:**

**Original Publish Date:** September 28, 1990

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=5161>

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