



# Aviation Investigation Final Report

<b>Location:</b>	MINCHUMINA, Alaska	<b>Accident Number:</b>	ANC85LA018
<b>Date &amp; Time:</b>	November 11, 1984, 14:00 Local	<b>Registration:</b>	N6821B
<b>Aircraft:</b>	PIPER PA-22	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE ACFT MADE A HARD LANDING ON A FROZEN LAKE DURING A PRECAUTIONARY LANDING. THE PLT SAID THAT CARGO ON BOARD HAD SHIFTED IN FLT AND HE ALSO HAD A LOSS OF 15 MPH IN AIRSPEED. THINKING IT MIGHT BE AN ICING PROBLEM, THE PLT MADE THE UNSCHEDULED LANDING. NO ICE WAS FOUND ON THE ACFT AFTER LANDING BUT THE ACFT WAS SUBSTANTIALLY DAMAGED BY THE IMPACT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

### Findings

Occurrence #1: CARGO SHIFT  
Phase of Operation: CRUISE - NORMAL

#### Findings

1. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. (F) LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND
3. (C) TIE DOWN - INADEQUATE - PILOT IN COMMAND
4. (C) AIRCRAFT WEIGHT AND BALANCE - IMPROPER - PILOT IN COMMAND
5. (F) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND

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Occurrence #2: HARD LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings  
6. (F) LANDING GEAR,MAIN GEAR ATTACHMENT - OVERLOAD

## Factual Information

### Pilot Information

<b>Certificate:</b>	None	<b>Age:</b>	35, Male
<b>Airplane Rating(s):</b>	None	<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 Expired	<b>Last FAA Medical Exam:</b>	October 2, 1980
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	41 hours (Total, all aircraft), 41 hours (Total, this make and model), 23 hours (Pilot In Command, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N6821B
<b>Model/Series:</b>	PA-22 PA-22	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	22-4117
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	November 6, 1984 Annual	<b>Certified Max Gross Wt.:</b>	1840 lbs
<b>Time Since Last Inspection:</b>	2 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3663 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	O-320-A2B
<b>Registered Owner:</b>	MICHAEL A JUDD	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>		<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>	Unknown	<b>Visibility</b>	5 miles
<b>Lowest Ceiling:</b>	Unknown / 2500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	3 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	-21°C
<b>Precipitation and Obscuration:</b>	N/A - None - Haze		
<b>Departure Point:</b>	FAIRBANKS , AK (FAI )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	MINCHUMINA , AK (MHM )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Precautionary landing;Straight-in

## Wreckage and Impact Information

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

## Administrative Information

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

**Additional Participating Persons:** SHANE MURRAY; FAIRBANKS , AK  
GARY CHILDERS; FAIRBANKS , AK

**Original Publish Date:**

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=4446>

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