



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	ALMA, CO	<b>Accident Number:</b>	DEN82DA037
<b>Date &amp; Time:</b>	03/01/1982, 0830 MDT	<b>Registration:</b>	N580P
<b>Aircraft:</b>	BELL 206B III	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None

**Flight Conducted Under:** Part 91: General Aviation - Business

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## Analysis

THE PILOT REPORTED THAT BEFORE THE ACCIDENT, THE FLIGHT HAD BEEN UNEVENTFUL AND ALL INSTRUMENTS WERE READING NORMAL EXCEPT THE TOT GAUGE. REPORTEDLY, IT WAS INDICATING 750 DEGREES, WHICH WAS ABOUT 100 DEGREES HIGHER THAN NORMAL FOR HIS POWER SETTING OF 70% TORQUE. HE STATED HE WAS FLYING AT 70 KNOTS WHEN THE HELICOPTER STARTED LOSING RPM. THE PASSENGER STATED THAT THEY WERE ABOUT 200 TO 300 FT ABOVE A RIDGE AS THEY WERE FLYING SOUTHWEST. THE PASSENGER REPORTED THAT AFTER THEY CROSSED THE RIDGE, THE HELICOPTER BEGAN LOSING ALTITUDE FAST. ACCORDING TO THE PILOT, THEY WERE COMING UP ON A RIDGE LINE, WHEN THE RPM BEGAN DROPPING; HOWEVER, HE WAS UNABLE TO DECELERATE ENOUGH TO LAND ON TOP OF THE RIDGE. THE HELICOPTER CAME IN CONTACT WITH THE GROUND ON THE SOUTH-SOUTHWEST SIDE OF THE RIDGE LINE AND CRASHED. EXAMINATION OF THE ENGINE REVEALED THE AIR BLEED VALVE WAS DIRTY AND HAD A HOLE IN THE DIAPHRAGM. IN THIS CONDITION, THE VALVE WOULD CLOSE LATE. THE ELEVATION WAS ABOUT 12,000 FT MSL, WIND GUSTING 30 KNOTS.

## Probable Cause and Findings

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

## Findings

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Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation: CRUISE

### Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. (C) BLEED AIR SYSTEM,VALVE - DIRTY(FOGGY)
3. (C) BLEED AIR SYSTEM,VALVE - LOOSE
4. ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND

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

### Findings

5. (F) WEATHER CONDITION - UNFAVORABLE WIND
6. (F) TERRAIN CONDITION - MOUNTAINOUS/HILLY
7. (F) TERRAIN CONDITION - HIGH TERRAIN
8. (F) TERRAIN CONDITION - DOWNHILL
9. POWER ON LANDING - ATTEMPTED - PILOT IN COMMAND

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	40, Male
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	06/17/1982
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	5389 hours (Total, all aircraft), 296 hours (Total, this make and model), 4889 hours (Pilot In Command, all aircraft), 138 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BELL	<b>Registration:</b>	N580P
<b>Model/Series:</b>	206B III 206B III	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	2694
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	5
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	3200 lbs
<b>Time Since Last Inspection:</b>	89 Hours	<b>Engines:</b>	1 Turbo Shaft
<b>Airframe Total Time:</b>	1789 Hours	<b>Engine Manufacturer:</b>	ALLISON
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	250-C20B
<b>Registered Owner:</b>	PUBLIC SERVICE CO. OF CO.	<b>Rated Power:</b>	317 hp
<b>Operator:</b>	PUBLIC SERVICE CO. OF CO.	<b>Operating Certificate(s) Held:</b>	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	20 Miles
Lowest Ceiling:	Unknown / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	20 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	/ 0° C
Precipitation and Obscuration:			
Departure Point:	DENVER, CO	Type of Flight Plan Filed:	VFR
Destination:	LEADVILLE, CO	Type of Clearance:	
Departure Time:	0730	Type of Airspace:	

## 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:	

## Administrative Information

Investigator In Charge (IIC):	Report Date:	03/01/1983
Additional Participating Persons:		
Publish Date:		
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .	

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).