



Aviation Investigation Final Report

Location:	VERMAL, Utah	Accident Number:	DEN82FTM11
Date & Time:	April 28, 1982, 10:00 Local	Registration:	N48217
Aircraft:	BELL 47G-3B-1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 Serious
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE PILOT STATED THAT HE EXPERIENCED A PARTIAL LOSS OF ENGINE POWER DURING LANDING AT AN ELEVATION OF ABOUT 5280 FT MSL. THE TEMPERATURE WAS ABOUT 50 DEGREES FAHRENHEIT. HE APPLIED FULL THROTTLE, BUT THE RPM DECAYED AND THE PLANE CRASH LANDED. A PARTIAL ENGINE TEARDOWN REVEALED THAT THE GROUNDING WIRE ON THE RIGHT MAGNETO WAS DISCONNECTED. ON THIS MAGNETO, A BENDIX S-200, THE DISCONNECTED WIRE WOULD CAUSE THE MAGNETO TO GROUND OUT AND CEASE FUNCTIONING. WITH ONE MAGNETO GROUNDED, THERE WOULD BE A LOSS OF ABOUT 200 RPM.

Probable Cause and Findings

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

Findings

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

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. (C) IGNITION SYSTEM,LOW TENSION WIRING - DISCONNECTED
3. (C) IGNITION SYSTEM,MAGNETO - INOPERATIVE

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

Findings

4. (F) TERRAIN CONDITION - HIGH TERRAIN

Factual Information

Pilot Information

Certificate:	Airline transport; Commercial	Age:	41, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 26, 1982
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	4983 hours (Total, all aircraft), 4 hours (Total, this make and model), 22 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N48217
Model/Series:	47G-3B-1 47G-3B-1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	2760
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	54 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6044 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	TVO-435
Registered Owner:	INTERMOUNTAIN SURVEY	Rated Power:	200 Horsepower
Operator:	INTERMOUNTAIN SURVEY	Operating Certificate(s) Held:	
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:	Unknown	Visibility	50 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	50°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	VERMAL , UT (SLC)	Type of Flight Plan Filed:	None
Destination:	VERMAL , UT (SLC)	Type of Clearance:	None
Departure Time:	08:00 Local	Type of Airspace:	

Airport Information

Airport:	VERMAL SLC	Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	2 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date: April 28, 1983

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=72922>

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](#).