



Aviation Investigation Final Report

Location:	TIERRA AMARILLA, New Mexico	Accident Number:	DEN89LA159
Date & Time:	July 7, 1989, 10:00 Local	Registration:	N8132J
Aircraft:	BELL 47G-3B-2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A TAKEOFF WAS ATTEMPTED FROM A SKI SLOPE, HEADING NORTH, DOWN SLOPE. THE PLT ESTIMATED THE WINDS WERE NORTH AT 5 KNOTS. THE DENSITY ALTITUDE WAS COMPUTED TO BE 11,000 FT. THE PLT SAID THAT DURING HOVER FOR TAKEOFF, THE ROTOR/ENGINE RPM BEGAN TO DECAY. HE SAID HE OBSERVED THE ENGINE RPM AT 2,700 BEFORE THE CRASH. THE HELICOPTER CRASHED 130 FEET DOWN SLOPE FROM THE LIFT OFF POINT, AND ROLLED OVER. A POST ACCIDENT ENGINE RUN FAILED TO REVEAL ANY EVIDENCE TO EXPLAIN THE REPORTED LOSS OF POWER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF THE PILOT TO MAINTAIN ROTOR RPM DURING THE PREMATURE LIFT-OFF WHICH RESULTED IN A FORCED LANDING. CONTRIBUTING TO THE ACCIDENT WAS THE HIGH DENSITY ALTITUDE CONDITIONS, AND UNSUITABLE TERRAIN.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. (C) ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND

3. (C) LIFT-OFF - PREMATURE - PILOT IN COMMAND
 4. TERRAIN CONDITION - DOWNHILL
 5. (F) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA
 6. TERRAIN CONDITION - ROUGH/UNEVEN
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Commercial	Age:	Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	September 20, 1988
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	5500 hours (Total, all aircraft), 50 hours (Total, this make and model), 5500 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N8132J
Model/Series:	47G-3B-2 47G-3B-2	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	6772
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	TVO-435-B1
Registered Owner:		Rated Power:	270 Horsepower
Operator:	EL AERO SERVICES, INC	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	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	18°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:	(SAF)	Type of Clearance:	None
Departure Time:	11:00 Local	Type of Airspace:	

Airport Information

Airport:	NONE	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:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	36.700931,-106.540405(est)

Administrative Information

Investigator In Charge (IIC): Collins, Robert

Additional Participating Persons: ROGER HILAIRE; ALBUQUERQUE , NM
FLOYD DOCKUM; ALBUQUERQUE , NM

Original Publish Date: October 24, 1990

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=17737>

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