



Aviation Investigation Final Report

Location:	GOSHEN, Utah	Accident Number:	DEN87LA019
Date & Time:	November 10, 1986, 13:10 Local	Registration:	N47042
Aircraft:	BELL 47G-3B-1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PLT WAS PRACTICING POWER RECOVERY AUTOROTATIONS THEN ATTEMPTED ONE POWER OFF, FULL STOP. THE PLT ALLOWED THE MAIN ROTOR RPM TO DECAY DURING APPROACH AND TOOK NO CORRECTIVE ACTION. THE ACFT LANDED HARD WITH SLIGHT FORWARD MOTION AND THE PLT APPLIED AFT CYCLIC. THE MAIN ROTOR STRUCK THE TAIL BOOM AND THE ACFT ROLLED OVER ON ITS RIGHT SIDE.

Probable Cause and Findings

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

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) AUTOROTATION - INTENTIONAL - PILOT IN COMMAND
 2. (C) LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND
 3. (F) COLLECTIVE - IMPROPER USE OF - PILOT IN COMMAND
 4. (F) FLARE - IMPROPER - PILOT IN COMMAND
 5. (C) ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND
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Occurrence #2: ROLL OVER
Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Commercial	Age:	27, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	January 24, 1986
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	854 hours (Total, all aircraft), 530 hours (Total, this make and model), 713 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N47042
Model/Series:	47G-3B-1 47G-3B-1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	6608
Landing Gear Type:		Seats:	3
Date/Type of Last Inspection:	March 5, 1986 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	400 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	TV0-435 BI
Registered Owner:	RAY OKELBERRY	Rated Power:	280 Horsepower
Operator:		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:	13:10 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	0°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GOSHEN , UT	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:50 Local	Type of Airspace:	Class G

Airport Information

Airport:		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:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	39.92979,-111.880302(est)

Administrative Information

Investigator In Charge (IIC): Tranter, Verlin

Additional Participating Persons: GEORGE ZAREMBA; SALT LAKE , UT

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=17149>

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](#).