



Aviation Investigation Factual Report

Location:	Kremmling, Colorado	Accident Number:	DEN04LA047
Date & Time:	February 13, 2004, 13:45 Local	Registration:	N83702
Aircraft:	Bell 47G-3B-1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Factual Information

On February 13, 2004, at approximately 1345 mountain standard time, a Bell, 47G-3B-1, N83702, was substantially damaged during a hard landing at McElroy Airfield, Kremmling, Colorado. The commercial pilot, the sole occupant on board, was not injured. Visual meteorological conditions prevailed. No flight plan had been filed for the local flight being conducted under the provisions of Title 14 CFR Part 91. The flight departed approximately 1230.

According to the pilot, he was practicing "power-on recovery, autorotations" from an altitude of 800 feet agl. He said he had completed two autorotations and was attempting a third autorotation when "it appeared that the aircraft had inadequate main rotor rpm." The pilot said he attempted to recover to a hover; however, "sufficient rpm was not available to recover," resulting in a hard landing. During the impact, the vertical stabilizer and both tail rotor blades were bent and the tail rotor short-shaft separated from the long shaft. An examination of the helicopters systems revealed no anomalies.

Pilot Information

Certificate:	Commercial; Flight instructor; Private	Age:	43, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 17, 2003
Occupational Pilot:		Last Flight Review or Equivalent:	October 13, 2003
Flight Time:	687 hours (Total, all aircraft), 276 hours (Total, this make and model), 568 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N83702
Model/Series:	47G-3B-1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3593
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	February 4, 2004 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	5.4 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	11523.2 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	TVO-435-B1A
Registered Owner:	On file	Rated Power:	270 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	EGE,6535 ft msl	Distance from Accident Site:	36 Nautical Miles
Observation Time:	13:51 Local	Direction from Accident Site:	225°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/ None	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	-8°C / -17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Kremmling, CO (20V)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	McElroy Airfield 20V	Runway Surface Type:	Dirt
Airport Elevation:	7411 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Simulated forced landing

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:	40.053333,-106.368331

Administrative Information

Investigator In Charge (IIC): Struhsaker, James

Additional Participating Persons: Mike Zadar; FAA FSDO; Denver, CO

Report Date: May 4, 2004

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=58803>

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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](#).