



National Transportation Safety Board Aviation Accident Final Report

Location:	Jackson, WY	Accident Number:	DEN01LA060
Date & Time:	03/02/2001, 1200 MST	Registration:	N9HE
Aircraft:	Bell 407	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Positioning

Analysis

The pilot of the helicopter was looking for a group of people to be picked up at a designated point. Flying over the location, he realized that they had not yet arrived, so he decided to land at an alternate location and await their arrival. He had landed at the alternate location previously but not on the day of the accident. He said the visibility was good, but there were no shadows due to the overcast. The approach was normal, and the pilot used a small pine tree to the right front quarter of the helicopter as a reference point. As the helicopter touched down, the pilot heard a loud noise and the helicopter yawed. Believing there had been a mechanical failure, the pilot lowered the collective control and closed the throttle. Postaccident inspection revealed there had not been a mechanical failure. Rather, the pilot had not seen the snow covered slope to the left front quarter of the helicopter. The main rotor blades struck the surface of the ground and the helicopter settled into deep snow. The transmission separated from its mounts, the main rotor blades were destroyed, and the tail boom was severed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate lateral and vertical clearance during landing. Factors were the clouds and snow-covered high terrain.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) TERRAIN CONDITION - HIGH TERRAIN
2. (C) ALTITUDE/CLEARANCE - INADEQUATE - PILOT IN COMMAND
3. (F) TERRAIN CONDITION - SNOW COVERED
4. (F) WEATHER CONDITION - CLOUDS

Factual Information

On March 2, 2001, at approximately 1200 mountain standard time, N9HE, a Bell 407, owned and operated by Helicopter Express, Inc., of Lawrenceville, Georgia, was substantially damaged when it collided with terrain while landing about 22 miles southwest of Jackson, Wyoming. The commercial certificated pilot, the sole occupant aboard, was not injured. Visual meteorological conditions prevailed, and no flight plan had been filed for the positioning flight being conducted under Title 14 CFR Part 91. The flight originated approximately 1020.

According to the pilot's accident report, the pilot was looking for a group of people to be picked up at a designated point. Flying over the location, he realized that they had not yet arrived, so he decided to land at an alternate location and await their arrival. He had landed at the alternate location previously but not on the day of the accident. He said the visibility was good, but there were no shadows due to the overcast. The approach was normal, and the pilot used a small pine tree to the right front quarter of the helicopter as a reference point. As the helicopter touched down, the pilot heard a loud noise and the helicopter yawed. Believing there had been a mechanical failure, the pilot lowered the collective control and closed the throttle.

Postaccident inspection revealed that the main rotor blades struck a snow covered slope to the left front quarter of the helicopter, and the helicopter settled into deep snow. The transmission separated from its mounts, the main rotor blades were destroyed, and the tail boom was severed.

Pilot Information

Certificate:	Commercial	Age:	51, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	06/20/2000
Occupational Pilot:		Last Flight Review or Equivalent:	10/11/2000
Flight Time:	22300 hours (Total, all aircraft), 140 hours (Total, this make and model), 22200 hours (Pilot In Command, all aircraft), 90 hours (Last 90 days, all aircraft), 38 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N9HE
Model/Series:	407	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	53073
Landing Gear Type:	Skid	Seats:	7
Date/Type of Last Inspection:	02/19/2001, 100 Hour	Certified Max Gross Wt.:	5250 lbs
Time Since Last Inspection:	17 Hours	Engines:	1 Turbo Shaft
Airframe Total Time:	1950 Hours at time of accident	Engine Manufacturer:	Rolls-Royce Allison
ELT:	Installed, not activated	Engine Model/Series:	C250-C47B
Registered Owner:	Helicopter Express, Inc.	Rated Power:	650 hp
Operator:	Helicopter Express, Inc.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	H11A

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	JAC, 6447 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	1035 MST	Direction from Accident Site:	38°
Lowest Cloud Condition:	Clear	Visibility	8 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.77 inches Hg	Temperature/Dew Point:	-9° C / -15° C
Precipitation and Obscuration:			
Departure Point:	Jackson, WY (NONE)	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	1020 MST	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Arnold W Scott	Report Date:	07/30/2001
Additional Participating Persons:	Michael J Maglione; FAA Flight Standards Field Office; Casper, WY		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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](#).