



National Transportation Safety Board Aviation Accident Data Summary

Location:	PARKMAN, WY	Accident Number:	DEN99LA092
Date & Time:	06/01/1999, 1100 MDT	Registration:	N7052L
Aircraft:	Hughes 269A	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

An hour after landing in an open field (6,200 feet msl) near Parkman, Wyoming, in the Bighorn National Forest, the pilot performed a practice takeoff without his passenger to test the aircraft's performance. The helicopter hovered normally after effective translational lift was achieved, and he climbed out at 40 knots. Shortly after clearing a 75-foot ridge 100 to 150 yards from the takeoff field just after coming out of ground effect, the aircraft experienced a downdraft and subsequently began to lose altitude. The power required for the helicopter to climb was greater than the power available. The aircraft impacted the ground through 60 to 80 feet of trees, and came to rest in an inverted position. According to the pilot, there were no mechanical problems and the engine was running on impact. Density altitude at the time of the accident was calculated to be 7,578 feet. According to calculated weight and performance data, the gross weight of the aircraft at the time of departure was approximately 1,232 lbs. At an indicated airspeed of 35 knots, the maximum obstacle clearance height was calculated to be 75 feet, with a maximum distance of 800 feet.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate in-flight planning by exceeding the helicopter's performance climb capability. Factors were the downdraft encountered during initial climb following takeoff, and the high density altitude.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
2. (C) AIRCRAFT PERFORMANCE, CLIMB CAPABILITY - EXCEEDED
3. (F) WEATHER CONDITION - DOWNDRAFT
4. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
5. TERRAIN CONDITION - MOUNTAINOUS/HILLY

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	44
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Helicopter; Instrument Airplane
Flight Time:	12600 hours (Total, all aircraft), 200 hours (Total, this make and model), 11750 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Registration:	N7052L
Model/Series:	269A 269A	Engines:	1 Reciprocating
Operator:	KENT W. POTTER	Engine Manufacturer:	Lycoming
Operating Certificate(s) Held:	None	Engine Model/Series:	HIO-360-B1A
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Weather Information Source:	Pilot
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	5 knots / 15 knots, 45°
Temperature:	13° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	(NONE)	Destination:	LAUREL, MT (6S8)

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): B. BEACH SCOTT

Adopted Date: 03/31/2000

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/>.

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