



Aviation Investigation Final Report

Location:	HOMER, Alaska	Accident Number:	ANC00LA053
Date & Time:	May 1, 2000, 12:30 Local	Registration:	N301MH
Aircraft:	Bell 206B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

During an on-demand passenger flight, the airline transport certificated pilot was landing a helicopter at a lake gauging station. The gauging station was surrounded by snow-covered terrain. His two passengers were conducting snow pack studies around the lake. Flat light conditions existed at the lake, and light drizzle was falling. The pilot was utilizing the gauging station as his landing reference point, but during the landing approach, he flew past the station and had no other visual references. The skids of the helicopter contacted the snow, and the pilot applied upward collective pitch. He attempted to stabilize the helicopter in a hover, but began drifting forward and to the left. The left landing gear skid contacted the snow, and the helicopter rolled onto its left side. A passenger described the weather conditions at the landing site as the 'inside of a ping pong ball.' The pilot recommended additional white-out training as a way to prevent the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudging the landing flare in whiteout/flat light conditions. Factors associated with the accident are the whiteout and flat lighting conditions.

Findings

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

Findings

1. (F) TERRAIN CONDITION - SNOW COVERED
2. (C) FLARE - MISJUDGED - PILOT IN COMMAND
3. (F) LIGHT CONDITION - OTHER

Occurrence #2: ROLL OVER

Phase of Operation: HOVER - IN GROUND EFFECT

Findings

4. (F) WEATHER CONDITION - WHITEOUT

Factual Information

On May 1, 2000, about 1230 Alaska daylight time, a high skid equipped Bell 206B helicopter, N301MH, was substantially damaged during a collision with snow-covered terrain, about 21 miles northeast of Homer, Alaska, about latitude 59 degrees, 45 minutes north, and longitude 150 degrees, 51 minutes west. The helicopter was being operated as a visual flight rules (VFR) on-demand passenger flight under Title 14, CFR Part 135, when the accident occurred. The helicopter was operated by Maritime Helicopters Inc., Homer, Alaska. The airline transport certificated pilot, and the two passengers, were not injured. Visual meteorological conditions prevailed. A VFR flight plan was filed. The flight originated at the Homer Airport, Homer, at 1130.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on May 1, at 1747, the Chief Pilot for the operator reported the helicopter was landing at Bradley Lake, located on the Kenai Peninsula. The helicopter pilot was landing next to a gauging station that was surrounded by snow-covered terrain. Flat light conditions existed at the lake, and light drizzle was falling. The sky conditions were 500 feet overcast, and the visibility was about 1 mile. The pilot was utilizing the gauging station as his landing reference point, but during the landing approach, he flew past the station and had no other visual references. The skids of the helicopter contacted the snow, and the pilot applied upward collective pitch. He attempted to stabilize the helicopter in a hover, but began drifting forward and to the left. The left landing gear skid contacted the snow, and the helicopter rolled onto its left side.

The Pilot/Operator report (NTSB form 6120.1/2) submitted by the pilot, included a written statement. In the statement, the pilot said that during the landing approach, he passed the gauging unit that he was using as a reference. After passing the unit, he focused his attention on the snow in front of the helicopter. When the helicopter touched down on the snow, the pilot said he thought the helicopter was still one or two feet above the snow surface. He brought the helicopter to a hover, but the helicopter drifted forward about 30 feet, and about 60 to 75 feet to the left. The left skid contacted the snow, and the helicopter rolled over. In the Recommendation Section of the 6120.1/2 form where comments can be added about how the accident could have been prevented, the pilot noted "additional white-out training."

Both passengers in the helicopter reported that during the landing approach, the helicopter developed a high sink rate and touched down hard on the snow, beyond the gauging station. The terrain presented no visual references, and one passenger described the visual conditions as "the inside of a ping pong ball." Both passengers said the weather conditions included bright, filtered sunlight through overcast skies, and a light rain.

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	67,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	April 5, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	16622 hours (Total, all aircraft), 966 hours (Total, this make and model), 15219 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N301MH
Model/Series:	206B 206B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2371
Landing Gear Type:	High skid	Seats:	5
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:		Engine Manufacturer:	Allison
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	250-C20R
Registered Owner:	MARITIME HELICOPTERS INC.	Rated Power:	450 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	ENRA

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:	Unknown	Visibility	1 miles
Lowest Ceiling:	Overcast / 500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	HOMER (PAHO)	Type of Flight Plan Filed:	VFR
Destination:		Type of Clearance:	None
Departure Time:	11:30 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	59.399131,-151.319931(est)

Administrative Information

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	MAURICE HENDRICKSON (FAA); ANCHORAGE , AK
Original Publish Date:	May 9, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=50956

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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](#).