

National Transportation Safety Board Aviation Accident Final Report

Location:	Kremmling, CO	Accident Number:	DEN03LA053
Date & Time:	03/19/2003, 1930 MST	Registration:	N711TZ
Aircraft:	Beech E-90	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 Minor
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled - Air Medical (Unspecified)		

Analysis

The pilot reported that he maneuvered for a left hand downwind leg for landing from the east to west. The pilot set up his downwind leg at 8,400 feet mean sea level putting him at what would have been 1,000 feet above the airport elevation of 7,411 feet. The pilot reported it was very dark and he could see the airport, but could not see the terrain. The pilot reported that suddenly he saw the ground. The airplane impacted the terrain and came to rest. The pilot reported that the airplane was experiencing no malfunctions prior to the accident. The airplane accident site was on the snow-covered edge of a mountain ridge at an elevation of 8,489 feet. An examination of the airplane's systems revealed no anomalies. Published terminal procedures for the runway indicated high terrain of 8,739 feet south-southeast of the airport. The published airport diagram for the airport directs right traffic for the pattern to runway 27.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper in-flight planning and his failure to maintain safe clearance from the high terrain. Factors contributing to the accident were the high terrain and the dark night.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: APPROACH - VFR PATTERN - DOWNWIND

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

- 3. (F) TERRAIN CONDITION HIGH TERRAIN
- 4. (F) LIGHT CONDITION DARK NIGHT

5. ALTITUDE - LOW

Factual Information

On March 19, 2003, at 1930 mountain standard time, a Beech E-90, N711TZ, operated by Mountain Flight Service, Incorporated, and piloted by an airline transport pilot, was substantially damaged when the airplane impacted mountainous terrain and subsequently nosed over, approximately 1-1/2 miles southeast of Kremmling-McElroy Field (20V), Kremmling, Colorado. Night visual meteorological conditions prevailed at the time of the accident. The non-scheduled, on demand, flight-for-life flight was being conducted under the provisions of 14 CFR Part 135. The cross-country flight originated at Grand Junction, Colorado, on an instrument flight rules (IFR) flight plan, and was en route to 20V. However, at 1928, the pilot cancelled the IFR flight plan and continued under night visual flight rules. The pilot, a paramedic, and a flight nurse on board all reported sustaining minor injuries in the accident.

The pilot reported that he maneuvered for a left hand downwind leg for landing from the east to west at 20V. The pilot set up his downwind leg at 8,400 feet mean sea level putting him at what would have been 1,000 feet above the airport elevation of 7,411 feet. The pilot reported it was very dark and he could see the airport, but could not see the terrain. The pilot reported that suddenly he saw the ground. The airplane impacted the terrain and came to rest. The pilot reported that the airplane was experiencing no malfunctions prior to the accident.

An examination of the airplane at the accident site showed the airplane resting inverted on the snow-covered edge of a mountain ridge at an elevation of 8,489 feet. The airplane's nose cone, forward fuselage, and nose gear doors were crushed aft. The nose gear was broken out. The airplane's right wing, outboard of the engine nacelle was bent downward approximately 20-degrees near mid-span. The airplane's left wing and left engine nacelle were twisted upward and bent aft. The airplane's vertical stabilizer and rudder were broken aft at the base. The right horizontal stabilizer and elevator were bent and twisted aft. Both propellers' blades showed torsional bending, chordwise scratches and tip curling. Flight control continuity was confirmed. An examination of the engines, engines' controls, and other airplane systems revealed no anomalies.

Published terminal procedures for runway 27 at 20V indicates high terrain of 8,739 feet southsoutheast of the airport. The published airport diagram for 20V directs right traffic for the pattern to runway 27.

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	50, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Balloon	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 None	Last FAA Medical Exam:	11/08/2002
Occupational Pilot:		Last Flight Review or Equivalent:	02/17/2003
Flight Time:	10564 hours (Total, all aircraft), 212 hours (Total, this make and model), 9629 hours (Pilot In Command, all aircraft), 64 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:	Beech	Registration:	N711TZ
Model/Series:	E-90	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	LW226
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	12/06/2002, Continuous Airworthiness	Certified Max Gross Wt.:	10100 lbs
Time Since Last Inspection:	53 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	8040 Hours as of last inspection	Engine Manufacturer:	Pratt & Whitney Canada
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	РТ6А-28
Registered Owner:	Mountain Flight Service, Inc.	Rated Power:	550 hp
Operator:	Mountain Flight Service, Inc.	Operating Certificate(s) Held:	On-demand Air Taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	LXV, 9927 ft msl	Distance from Accident Site:	50 Nautical Miles
Observation Time:	1932 MST	Direction from Accident Site:	164°
Lowest Cloud Condition:	Few / 2600 ft agl	Visibility	5 Miles
Lowest Ceiling:	Broken / 3300 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-3°C/-5°C
Precipitation and Obscuration:			
Departure Point:	Grand Junction, CO (GJT)	Type of Flight Plan Filed:	IFR
Destination:	Kremmling, CO (20V)	Type of Clearance:	IFR
Departure Time:	1848 MST	Type of Airspace:	Class D

Airport Information

Airport:	Kremmling-McElroy Field (20V)	Runway Surface Type:	Asphalt
Airport Elevation:	7411 ft	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	5540 ft / 75 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	3 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Minor	Latitude, Longitude:	40.043333, -106.350000

Administrative Information

Investigator In Charge (IIC):	David C Bowling	Report Date:	09/30/2003
Additional Participating Persons:	Jim Vodicka; Federal Aviation Administration; Denver, CO		
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 <u>pubing@ntsb.gov</u> , or at 800-877-6799. Dockets released after this date are available at <u>http://dms.ntsb.gov/pubdms/</u> .		

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