



Aviation Investigation Final Report

Location:	Summit, Utah	Accident Number:	SEA06CA129
Date & Time:	June 24, 2006, 18:40 Local	Registration:	N2987L
Aircraft:	Mooney M-20F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While climbing out of a valley in mountainous terrain, the aircraft encountered a severe downdraft while crossing over a ridge. As the aircraft began to sink, the pilot added full power, lowered the nose, and kept the wings level. The aircraft did not climb at a greater rate than the downdraft was sinking, and it eventually descended into the terrain in a wings-level position. According to the pilot, there were no problems with the aircraft's engine or flight controls.

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 clearance from the terrain during a climb. Encounter with a severe downdraft, and mountainous terrain were factors.

Findings

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

Findings

1. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
2. (F) TERRAIN CONDITION - MOUNTAINOUS/HILLY
3. (F) WEATHER CONDITION - DOWNDRAFT

Factual Information

While climbing out of a valley in mountainous terrain, the aircraft encountered a severe downdraft while crossing over a ridge. As the aircraft began to sink, the pilot added full power, lowered the nose, and kept the wings level. The aircraft did not climb at a greater rate than the downdraft was sinking, and it eventually descended into the terrain in a wings-level position. According to the pilot, there were no problems with the aircraft's engine or flight controls.

Pilot Information

Certificate:	Flight instructor; Private	Age:	49, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3	Last FAA Medical Exam:	September 1, 2004
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1936 hours (Total, all aircraft), 220 hours (Total, this make and model), 50 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N2987L
Model/Series:	M-20F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	670346
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	IO-360-A1A
Registered Owner:	Paul Bowmar	Rated Power:	
Operator:		Operating Certificate(s) Held:	None

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:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Cedar City, UT (KCDC)	Type of Flight Plan Filed:	None
Destination:	(KCDC)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	2 Minor, 1 None	Latitude, Longitude:	37.728054,-112.943611

Administrative Information

Investigator In Charge (IIC): Anderson, Orrin

Additional Participating Persons:

Original Publish Date: October 31, 2006

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=63984>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).