

# **Aviation Investigation Final Report**

Location:	Durango, Colorado	Accident Number:	DEN04CA120
Date & Time:	August 10, 2004, 16:05 Local	<b>Registration:</b>	N6212Q
Aircraft:	Mooney M20J	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

# Analysis

The pilot reported that on final from a visual approach, at approximately 300 feet above ground level, the airplane began to sink rapidly. The pilot said he applied full power, and barely cleared a drop-off on the approach end of the runway. He also said that the stall warning horn was sounding. The pilot said the right wing dropped, and the airplane contacted the runway and veered to the right, coming to rest off the right edge of the runway. In his statement to a Federal Aviation Administration inspector, the pilot said he encountered a downdraft, applied power, but didn't have enough altitude to recover. An examination of the accident scene showed the airplane struck the south side of a service road located 24 feet from the approach end of the runway causing substantial damage to the right wing, right main landing gear, and fuselage. The airplane then veered across the approach end of the runway and came to rest off the right side. Flight control continuity was confirmed. An examination of the engine and other airplane systems revealed no anomalies. Approximately 30 minutes following the accident, the Aviation Routine Weather Report for Durango/La Plata County Airport, (DRO) 7 nautical miles southeast of the accident scene, was winds 340 degrees at 10 knots, clear skies, 10 statute miles visibility, temperature 82 degrees Fahrenheit (F), dew point 35 degrees F, altimeter 30.27 inches, and remarks, peak wind 330 degrees at 32 knots, occurring approximately 3 minutes before the accident. The remarks also included lightning and thunderstorms northeast, south, and southwest of DRO.

# **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate compensation for wind conditions and his failure to maintain adequate airspeed resulting in a stall. Factors contributing to the accident were the wind gusts, the downdraft, and the road.

#### **Findings**

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) WEATHER CONDITION - GUSTS

2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

3. (F) WEATHER CONDITION - DOWNDRAFT

4. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND

5. STALL

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

6. (F) TERRAIN CONDITION - ROADWAY/HIGHWAY

#### **Factual Information**

On August 10, 2004, at 1605 mountain daylight time, a Mooney M20J, N6212Q, piloted by a private pilot, was substantially damaged when it impacted the edge of a road, just prior to the approach end of runway 01 at the Durango-Animas Air Park (5C00), Durango, Colorado. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under the provisions of Title 14 CFR Part 91 without a flight plan. The pilot and two passengers on board reported no injuries. A third passenger on board sustained minor injuries. The cross-country flight originated at Albuquerque, New Mexico, at 1440.

The pilot reported that on final from a visual approach, at approximately 300 feet above ground level, the airplane began to sink rapidly. The pilot said he applied full power, and barely cleared a drop-off on the approach end of the runway. He also said that the stall warning horn was sounding. The pilot said the right wing dropped, and the airplane contacted the runway and veered to the right, coming to rest off the right edge of the runway. In his statement to a Federal Aviation Administration inspector, the pilot said he encountered a downdraft, applied power, but didn't have enough altitude to recover.

An examination of the accident scene showed the airplane struck the south side of a service road located 24 feet from the approach end of the runway. The airplane then veered across the approach end of the runway and came to rest off the right side. The airplane's right wing was bent aft and upward. The right wing flap and right main landing gear were broken aft. The airplane's fuselage was bent and wrinkled aft of the baggage compartment. The propeller blades showed torsional bending and chordwise scratches. Flight control continuity was confirmed. An examination of the engine and other airplane systems revealed no anomalies.

At 1634, the Aviation Routine Weather Report (METAR) for Durango/La Plata County Airport (DRO), 7 nautical miles southeast of the accident scene, was winds 340 degrees at 10 knots, clear skies, 10 statute miles visibility, temperature 82 degrees Fahrenheit (F), dew point 35 degrees F, altimeter 30.27 inches, and remarks, peak wind 330 degrees at 32 knots occurring at 1602. The remarks also included lightning and thunderstorms northeast, south, and southwest of DRO.

#### **Pilot Information**

Certificate:	Private	Age:	69,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3	Last FAA Medical Exam:	October 13, 2003
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	563 hours (Total, all aircraft), 182 hours (Total, this make and model), 32 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

# Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N6212Q
Model/Series:	M20J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-0031
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-A3B6D
Registered Owner:	David L. Feller	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:	DRO,6685 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	16:34 Local	Direction from Accident Site:	120°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.27 inches Hg	Temperature/Dew Point:	28°C / 2°C
Precipitation and Obscuration:			
Departure Point:	Durango, CO (5CO0)	Type of Flight Plan Filed:	None
Destination:	Albuquerque, NM (ABQ )	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class E

#### **Airport Information**

Airport:	Durango-Animas Airpark 5CO0	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	01	IFR Approach:	Unknown
Runway Length/Width:		VFR Approach/Landing:	

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor, 2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 Minor, 3 None	Latitude, Longitude:	37.203056,-107.869163

#### **Administrative Information**

Investigator In Charge (IIC):	Bowling, David
Additional Participating Persons:	
Original Publish Date:	October 28, 2004
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=59875

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.