

# **Aviation Investigation Final Report**

Location:	Broomfield, Colorado	Accident Number:	DEN05CA007
Date & Time:	October 8, 2004, 11:30 Local	<b>Registration:</b>	N14DV
Aircraft:	Mooney M20E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

### Analysis

While performing a touch and go maneuver, the pilot failed to maintain control of the airplane during the landing. On the approach, the pilot configured and stabilized the airplane for landing and "all seemed to be in order." After crossing the runway threshold, the pilot felt the speed and sink rate were too fast. The airplane touched down and bounced twice. At that point, the pilot added power to abort the landing. The airplane drifted to the left and began to porpoise. Subsequently, the airplane skipped across the grass adjacent to the runway, went down an embankment, and came to rest upright against a chain-linked fence. The pilot reported no mechanical problems with the airplane prior to the accident.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper flare and recovery from a bounced landing during a touch and go maneuver. Contributing factors were the excessive airspeed and descent rate during the approach.

#### **Findings**

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: LANDING - ABORTED

Findings 1. (F) AIRSPEED(VREF) - EXCESSIVE - PILOT IN COMMAND (F) PROPER DESCENT RATE - EXCESSIVE - PILOT IN COMMAND
(C) FLARE - IMPROPER - PILOT IN COMMAND
(C) RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND
ABORTED LANDING - ATTEMPTED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: LANDING - ABORTED

Findings

6. TERRAIN CONDITION - DROP-OFF/DESCENDING EMBANKMENT 7. OBJECT - FENCE

#### **Factual Information**

On October 8, 2004, approximately 1130 mountain daylight time, a Mooney M20E single-engine airplane, N14DV, sustained substantial damage when it impacted terrain and a fence following a loss of control while performing touch and go maneuvers at Jeffco Airport, Broomfield, Colorado. The private pilot, who was the sole occupant, was not injured. The airplane was registered to and operated by Advantage Aviation Inc., Wheat Ridge, Colorado. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight. The local flight departed Jeffco Airport approximately 1110.

According to the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2), the pilot stated he was performing touch and go landings to Runway 29L. On the approach, the pilot configured and stabilized the airplane for landing and "all seemed to be in order." After crossing the runway threshold, the pilot felt the speed and sink rate were too fast. The airplane touched down and bounced twice. At that point, the pilot added power to abort the landing. The airplane drifted to the left and began to porpoise. Subsequently, the airplane skipped across the grass adjacent to the runway, went down an embankment, and came to rest upright against a chain-linked fence.

An FAA inspector, who responded to the accident site, reported both wings were bent, the fuselage and empennage were wrinkled. The pilot reported no mechanical problems with the airplane prior to the accident. In addition, the pilot did not have a complex airplane endorsement in his logbook.

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Certificate:	Private	Age:	59,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3	Last FAA Medical Exam:	September 28, 2004
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	405 hours (Total, all aircraft), 35 hours (Total, this make and model), 4 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

#### **Pilot Information**

### Aircraft and Owner/Operator Information

	Maanay	Deviatuations	
Aircraft Make:	Mooney	Registration:	N14DV
Model/Series:	M20E	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	804
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
Registered Owner:	Advantage Aviation Inc.	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:	Broomfield, CO (BJC )	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:15 Local	Type of Airspace:	Class D

### **Airport Information**

Airport:	Jeffco Airport BJC	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	29L	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 None	Latitude, Longitude:	39.913887,-105.116668

#### **Administrative Information**

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	
Original Publish Date:	December 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=60313

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.