Aviation Investigation Final Report

Location:	S. Charleston, West Virginia	**Accident Number:**	NYC01LA069
Date & Time:	January 26, 2001, 10:53 Local	**Registration:**	N9558M
Aircraft:	Mooney M-20	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot arrived at the airport, and serviced the airplane with 10 gallons of fuel. He started the engine, checked all the gauges, found no anomalies, and departed. During the flight, the pilot preformed several touch-and-goes at several different airports before proceeding to his planned destination. At his destination, the pilot maneuvered the airplane to land. Once on final, the pilot selected approach flaps, but they did not extend. With the throttle completely retarded, the pilot started executing "S" turns to maintain a proper descent rate. On short final, the pilot noticed that the airplane was right of the runway so he turned left, and then started a flare to land. The airplane touched down and went off the runway to the left. It then hit a hangar and parked airplane about 500 feet from the approach end of the runway before coming to an stop. Continuity of the flaps system could not be verified because of impact damage.

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 runway alignment during the landing roll.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings
1. (C) PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On January 26, 2001, at 1053 Eastern Standard Time, a Mooney M-20, N9558M, was substantially damaged while landing at the Mallory Airport (WV12), South Charleston, West Virginia. The certificated private pilot and passenger received minor injuries. Visual meteorological conditions prevailed for the flight that departed Summersville, West Virginia, destined for WV12. No flight plan was filed for the personal flight that was conducted under 14 CFR Part 91.

According to the pilot, he arrived at the airport and serviced the airplane with 10 gallons of fuel. The pilot started the engine, and let it run for awhile to ensure it had warmed up because of the cold temperatures that morning. The pilot checked all the gauges, found no anomalies, and then departed. During the flight, the pilot preformed several touch-and-goes at several different airports before proceeding to WV12. Approximately 1 hour 15 minutes into the flight, and while operating on the left fuel tank, the engine began to "sputter". The pilot selected the right tank and the engine returned to smooth operation. When the engine started to "sputter" the left tank indicated 1/8. At the time the pilot switched to the right, it indicated 1/8 of a tank. The pilot became "very concerned," so he requested radar vectors to Charleston, West Virginia. While en route to Charleston, the pilot realized he was close to his planned destination, so he then requested vectors to WV12. Within a "few" minutes the pilot identified the airport, and maneuvered the airplane to land on Runway 33.

Once on final, the pilot selected approach flaps, but they did not extend. With the throttle completely retarded, the pilot started executing "S" turns to maintain a proper descent rate. On short final, the pilot noticed that the airplane was right of the runway so he turned left, and then started a flare to land. The airplane touched down on the runway, but then departed it to the left. When the airplane departed the runway, the pilot had the controls all the way to the right. Before coming to a stop, the airplane struck a hangar and a parked airplane about 500 feet past the approach end of the runway. Except for being unable to extent the flaps, the pilot did not report any other failures or malfunctions with the airplane or its systems.

According to a Federal Aviation Administration inspector that responded to the accident, continuity of the flaps system could not be verified because of impact damage.

Pilot Information

Certificate:	Private	**Age:**	48,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	February 23, 2000
Occupational Pilot:		**Last Flight Review or Equivalent:**	April 10, 1999
Flight Time:	625 hours (Total, all aircraft), 371 hours (Total, this make and model), 595 hours (Pilot In Command, all aircraft), 3 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	**Registration:**	N9558M
Model/Series:	M-20	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	670135
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	March 12, 2000 Annual	**Certified Max Gross Wt.:**	2740 lbs
Time Since Last Inspection:	19.3 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3633.6 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	IO-360-A1A
Registered Owner:	William Dean	**Rated Power:**	200 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	CRW,982 ft msl	**Distance from Accident Site:**	46 Nautical Miles
Observation Time:	15:54 Local	**Direction from Accident Site:**	17°
Lowest Cloud Condition:	Scattered / 12000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/ None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.2 inches Hg	**Temperature/Dew Point:**	-2°C / -8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sommersville, WV (SXL)	**Type of Flight Plan Filed:**	None
Destination:	S. Charleston, WV (WV12)	**Type of Clearance:**	None
Departure Time:	09:30 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	MALLORY WV12	**Runway Surface Type:**	Asphalt
Airport Elevation:	880 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	33	**IFR Approach:**	None
Runway Length/Width:	2000 ft / 24 ft	**VFR Approach/Landing:**	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Minor	**Latitude, Longitude:**	38.309188,-81.749916(est)

Administrative Information

Investigator In Charge (IIC):	Muzio, David
Additional Participating Persons:	Tom Fye; FAA/FSDO; Charleston, WV
Original Publish Date:	July 30, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51391