



# **Aviation Investigation Final Report**

Location:	Bloomfield, Indiana	Accident Number:	CEN12LA198
Date & Time:	March 23, 2012, 21:00 Local	<b>Registration:</b>	N201QB
Aircraft:	Mooney M20J	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 Serious
Flight Conducted Under:	Part 91: General aviation - Positioning		

### Analysis

The pilot was attempting to land on a lighted grass runway at night. His first two attempts to land were aborted. According to the passenger, the pilot landed the airplane on his third attempt with only 400 feet of available runway remaining and then "slammed" on the brakes, and the airplane began to slide. After the airplane exited the runway end, the pilot applied full power to abort the landing; however, the airplane only became momentarily airborne before it stalled and collided with a levy.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to land with sufficient runway remaining to stop, which resulted in an unsuccessful aborted landing, inadvertent stall, and collision with terrain.

Findings

Personnel issues

Aircraft control - Pilot

## **Factual Information**

History of Flight	
Landing-aborted after touchdown	Loss of control on ground (Defining event)

On March 23, 2012, at 2100 eastern daylight time, N201QB, a Mooney M20J airplane, was substantially damaged when it collided with an embankment during an aborted landing on runway 18 at Shawnee Airport (113), Bloomfield, Indiana. The commercial pilot and the passenger were seriously injured. The airplane was co-registered to and operated by the pilot. No flight plan was filed for the flight that originated at Sullivan County Airport (SIV), Sullivan, Indiana, about 2040, and destined for 113. Visual meteorological conditions prevailed for the repositioning flight conducted under 14 Code of Federal Regulations Part 91.

In an interview with a Federal Aviation Administration (FAA) inspector, the pilot stated that he made four attempts to land on the 2,160-foot-long by 150-foot-wide, sod strip equipped with non-standard runway edge lights. On the fourth attempt, he landed the airplane, but said the brakes did not seem to be working because the airplane was not slowing down. The pilot attempted to abort the landing and subsequently impacted a levy south of the runway.

The passenger told the FAA inspector that they approached the airport as it was getting dark outside. The pilot made three (not four as reported by the pilot) attempts to land, but each time he kept turning onto the base leg too early, which resulted in a higher than normal final approach. On the first attempt, the pilot touched down, but elected to abort the landing. On the second attempt, the airplane touched down with less than 200 feet of runway remaining, so the pilot applied power and went around again. On the third landing attempt, the airplane touched down with approximately 400 feet of runway remaining. The pilot "slammed" on the brakes, and the airplane began to slide. When the airplane went off the runway, the pilot applied full power and the nose of the airplane pitched up. The main landing gear wheels crossed over a dirt road separating the runway and a plowed field, and momentarily became airborne. The passenger said he saw the stall warning light illuminated, but could not recall hearing the stall horn. The airplane stalled and impacted with a creek bank.

An on-scene examination of the airplane was conducted by two FAA inspectors. According to an inspector, the airplane sustained substantial damage to the firewall and the fuselage. The runway and surrounding area appeared to be wet/soft from recent rainfall.

The pilot held a commercial pilot certificate for airplane single-engine land, instrument airplane. He also held a certified flight and ground instructor ratings. His last FAA Third Class medical was issued on July 25, 2011. At that time, he reported a total of 1,300 flight hours.

Weather at Monroe County Airport (BMG), Bloomfield, Indiana, approximately 19 miles east of

the accident site, at 2053, was reported as wind calm, visibility 10 miles, clouds broken at 3,700 feet, overcast clouds at 4,600 feet, temperature 15 degrees Celsius, dewpoint 12 degrees Celsius, and an altimeter setting of 29.80 inches of Mercury. Remarks at that time were for distant lightning northeast and southeast of the airport.

Phot information			
Certificate:	Commercial; Flight instructor	Age:	55,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	July 25, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1300 hours (Total, all aircraft)		

#### **Pilot Information**

#### Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N201QB
Model/Series:	M20J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-0383
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2740 lbs
Time Since Last Inspection:	18 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4464 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO360 SER
Registered Owner:	WOODS EDWARD	Rated Power:	180 Horsepower
Operator:	WOODS EDWARD	Operating Certificate(s) Held:	None

### Meteorological Information and Flight Plan

			N11 1 1
Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
<b>Observation Facility, Elevation:</b>	BMG,846 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Overcast / 4600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.79 inches Hg	Temperature/Dew Point:	15°C / 12°C
Precipitation and Obscuration:			
Departure Point:	Sullivan, IN (SIV )	Type of Flight Plan Filed:	Unknown
Destination:	Bloomfield, IN (113)	Type of Clearance:	Unknown
Departure Time:	20:40 Local	Type of Airspace:	

## **Airport Information**

Airport:	Shawnee Airport 113	Runway Surface Type:	Grass/turf
Airport Elevation:	501 ft msl	<b>Runway Surface Condition:</b>	Soft;Wet
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	2160 ft / 150 ft	VFR Approach/Landing:	Full stop

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	39.038887,-87.001388(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Yeager, Leah	
Additional Participating Persons:	Bradley Behnkee; FAA/FSDO; Indianapolis, IN	
Original Publish Date:	May 23, 2013	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=83203	

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 <u>here</u>.