

Aviation Investigation Final Report

Location:	Rector, Arkansas	Accident Number:	FTW02LA253
Date & Time:	September 7, 2002, 12:14 Local	Registration:	N6369Q
Aircraft:	Mooney M20F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		
Defining Event:		-	

Analysis

During the left downwind pattern, the pilot slowed the airplane to 100 knots indicated airspeed and performed the gear extension procedure. The main landing gear position indicator in the cockpit showed that the gear was not down and locked. The pilot added power, recycled the main gear lever, and got a green indicator light on the instrument panel. While the pilot was performing the landing gear extension, the airplane descended from 1,100 feet msl to 800 feet msl. The pilot added power and the airplane "seemed to respond." The pilot added "two pumps of flaps" and turned the airplane to enter a left base pattern. During the turn, the airplane "seemed to rock and burble as a stall," and the pilot rolled wings level and added full throttle. Subsequently, during the turn from left base to final approach over the trees, the airplane "seemed to fall out with a high sink rate." The pilot leveled the wings, and retracted the main landing gear; however, the airplane struck the trees.

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 adequate airspeed which resulted in an inadvertent stall.

Findings

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

Findings

1. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND 2. STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: DESCENT - UNCONTROLLED

Findings 3. OBJECT - TREE(S)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

Findings 4. TERRAIN CONDITION - GROUND

Factual Information

On September 7, 2002, at 1214 central daylight time, a Mooney M20F, single-engine airplane, N6369Q, struck trees and terrain following a loss of control during the base to final turn for runway 18 at the Rector Airport, near Rector, Arkansas. The airplane was owned and operated by the pilot under Code of Federal Regulations Part 91. The private pilot and the 3 passengers received minor injures, and the airplane sustained substantial damage. Visual meteorological conditions prevailed for the cross-country flight, and a flight plan was not filed. The personal flight departed Kennett, Missouri, approximately 1200, with Rector, Arkansas, as its intended destination.

The FAA inspector, who responded to the accident site, found the airplane in a heavy wooded area approximately 200 yards short of the runway. The airplane was resting on its left side in a near inverted attitude. The main landing gear was in the retracted position. The left wing and the aft fuselage were found separated from the airframe.

On a written statement, the 4,000-hour pilot reported that during the left downwind pattern, he slowed the airplane to 100 knots indicated airspeed and performed the gear extension procedure. The main landing gear position indicator in the cockpit showed that the gear was not down and locked. The pilot added power, recycled the main gear lever, and got a green indicator light on the instrument panel. During the time in which the pilot was performing the landing gear extension, the airplane descended from 1,100 feet msl to 800 feet msl. The pilot added power and the airplane "seemed to respond." The pilot added "two pumps of flaps" and turned the airplane to enter a left base pattern. During the turn, the airplane "seemed to rock and burble as a stall," and the pilot rolled wings level and added full throttle. Subsequently, during the turn from left base to final approach over the trees, the airplane "seemed to fall out with a high sink rate." The pilot leveled the wings, and retracted the main landing gear; however, the airplane struck the trees.

Pilot Information

Certificate:	Private	Age:	59,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	August 8, 2002
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	4000 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N6369Q
Model/Series:	M20F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	670451
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	August 1, 2002 Annual	Certified Max Gross Wt.:	2740 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2094 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-360-A1A
Registered Owner:	Allen R. Earls	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
conditions at Accident Site.		condition of Light.	Day
Observation Facility, Elevation:	JBR,262 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	28°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.1 inches Hg	Temperature/Dew Point:	29°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Kennett, MO (TKX)	Type of Flight Plan Filed:	None
Destination:	Rector, AR (7M8)	Type of Clearance:	VFR
Departure Time:	12:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Rector Airport 7M8	Runway Surface Type:	Asphalt
Airport Elevation:	281 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3405 ft / 60 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	3 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 Minor	Latitude, Longitude:	36.25,-90.319442

Administrative Information

Investigator In Charge (IIC):	Roach, Joyce
Additional Participating Persons:	Steven A Buckner; FAA FSDO; Little Rock, AR
Original Publish Date:	September 30, 2003
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=55663

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.