



Aviation Investigation Final Report

Location:	Springfield, Tennessee	Accident Number:	ERA13CA172
Date & Time:	March 16, 2013, 08:30 Local	Registration:	N3545H
Aircraft:	Mooney M20J	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, and as corroborated by the pilot-rated passenger, the pilot first completed two touch-and-go landings with wind at 14 knots, gusting to 22 knots directly down the runway. The pilot then attempted a third landing and, approaching the touchdown point, the airplane yawed 30 to 45 degrees to the right, then back to the left of centerline. It subsequently rolled to the left, the left wing tip impacted the ground, and the pilot added full power. The airplane continued to the left, the pilot reduced power, and the airplane settled into the grass. It then skidded across a ramp and impacted a hangar and a fuel pump. Photographs revealed substantial damage to the outboard leading edge of the left wing and a left-arcing runway scrape mark toward the hangar. The pilot reported no preexisting mechanical malfunctions or failures with the airplane that would have precluded normal operation.

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 airplane control while landing in gusting wind conditions.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Incorrect action performance - Pilot
Environmental issues	Gusts - Contributed to outcome

Factual Information

History of Flight

Landing-flare/touchdown	Loss of control on ground (Defining event)
Landing-flare/touchdown	Dragged wing/rotor/float/other
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	49, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	March 4, 2013
Occupational Pilot:		Last Flight Review or Equivalent:	October 9, 2012
Flight Time:	4900 hours (Total, all aircraft), 97 hours (Total, this make and model), 3500 hours (Pilot In Command, all aircraft), 19 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N3545H
Model/Series:	M20J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-1036
Landing Gear Type:	Retractable - Tricycle	Seats:	4
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:	I0360 SER A&C
Registered Owner:	G & W Aviation LLC	Rated Power:	200 Horsepower
Operator:	Robert Waite	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	M91	Distance from Accident Site:	
Observation Time:	08:30 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 22 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Springfield, TN (M91)	Type of Flight Plan Filed:	None
Destination:	Springfield, TN (M91)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Springfield - Robertson County M91	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	5505 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	36.536666,-86.921112(est)

Administrative Information

Investigator In Charge (IIC):	Cox, Paul
Additional Participating Persons:	Timothy Allen; FAA/FSDO; Nashville, TN
Original Publish Date:	August 7, 2013
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=86439

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