



# Aviation Investigation Final Report

<b>Location:</b>	Murfreesboro, Tennessee	<b>Accident Number:</b>	ERA19LA028
<b>Date &amp; Time:</b>	October 28, 2018, 12:10 Local	<b>Registration:</b>	N5624S
<b>Aircraft:</b>	Beech V35	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The private pilot was conducting a cross-country, personal flight. He reported that, during approach to the destination airport, he had to manually extend the landing gear because he noticed the "down" light was not green. A witness who was in the airport terminal reported that he heard the pilot announce on the CTAF that his airplane was having "amperage" issues and that he might have to land with no radios. The pilot then asked him to confirm that the landing gear were extended. The witness went out to the taxiway and checked the landing gear status as the pilot conducted a low pass over the runway. The landing gear was not extended fully. The pilot stated that he attempted to go around but that the airplane was "sucked down" into trees by "a very strong wind" as the airplane proceeded beyond the departure end of the runway.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airframe or engine that would have precluded normal operation. Examination of the wreckage revealed that the alternator switch was in the "off" position, which would have prevented the battery from charging and likely led to there being insufficient battery power to extend the landing gear.

The airport's automated weather observation station reported that, about the time of the accident, there was a right quartering headwind at 14 knots, gusting to 19 knots.

## 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 maneuvering at low altitude in gusting wind conditions.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Altitude - Not attained/maintained
<b>Environmental issues</b>	Gusts - Effect on operation

# Factual Information

## History of Flight

<b>Maneuvering-low-alt flying</b>	Miscellaneous/other
<b>Maneuvering-low-alt flying</b>	Loss of control in flight (Defining event)
<b>Uncontrolled descent</b>	Collision with terr/obj (non-CFIT)

On October 28, 2018, about 1210 central daylight time, a Beech V35, N5624S, was substantially damaged when it impacted trees while maneuvering at low altitude near Murfreesboro Municipal Airport (MBT), Murfreesboro, Tennessee. The private pilot was seriously injured. The airplane was privately owned and operated by the pilot under the provisions of Title 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no flight plan was filed for the personal flight that originated from Gatlinburg-Pigeon Forge Airport (GKT), Sevierville, Tennessee, about 1000.

The pilot reported that he attempted to extend the landing gear while in the airport traffic pattern at MBT. He then noticed that the green cockpit indicator was not illuminated and manually extended the landing gear. The pilot subsequently requested that personnel on the ground confirm that the landing gear was extended and he performed a low pass over runway 18. The pilot was told that the landing gear were not extended, so he attempted a go-around, but was "sucked down" into trees by a very strong wind. Other than a possible electrical issue, the pilot reported that there were no other preimpact mechanical malfunctions with the airframe or engine.

A witness stated that he and a friend were in the MBT airport terminal building when they heard the pilot announce on the common traffic advisory frequency that his airplane was having "amperage" issues and he might be performing a landing with no radios. The pilot then asked if the witness could visually confirm that the landing gear was extended. The witness agreed and went to a taxiway with a handheld radio while the pilot performed a low pass over runway 18. The witness reported to the pilot that the landing gear was only partially extended. The airplane then proceeded beyond the departure end of the runway, losing altitude, looked like it stalled and descended into trees.

Examination of the wreckage by a Federal Aviation Administration inspector revealed damage to both wings and the fuselage. The inspector noted that the alternator switch was in the off position.

The recorded weather at MBT, at 1215, included wind from 210° at 14 knots, gusting to 19 knots, and a clear sky.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	79,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	December 7, 2017
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	November 1, 2017
<b>Flight Time:</b>	2208 hours (Total, all aircraft), 999999 hours (Total, this make and model), 7 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N5624S
<b>Model/Series:</b>	V35 UNDESIGNAT	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1966	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	D-8168
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	October 27, 2018 Annual	<b>Certified Max Gross Wt.:</b>	3400 lbs
<b>Time Since Last Inspection:</b>	2 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4603 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	C91 installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-520
<b>Registered Owner:</b>		<b>Rated Power:</b>	285 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MBT, 614 ft msl	<b>Distance from Accident Site:</b>	5 Nautical Miles
<b>Observation Time:</b>	12:15 Local	<b>Direction from Accident Site:</b>	360°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	9 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	14 knots / 19 knots	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	210°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	29.92 inches Hg	<b>Temperature/Dew Point:</b>	21°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Sevierville, TN (GKT )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Murfreesboro, TN (MBT )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:00 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Murfreesboro Municipal Airport MBT	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	614 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4753 ft / 100 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious	<b>Latitude, Longitude:</b>	35.878612, -86.377502(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gretz, Robert
<b>Additional Participating Persons:</b>	Michael Salas; FAA/FSDO; Nashville, TN
<b>Original Publish Date:</b>	April 20, 2020
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=98550">https://data.nts.gov/Docket?ProjectID=98550</a>

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