



# Aviation Investigation Final Report

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<b>Location:</b>	Kerrville, Texas	<b>Accident Number:</b>	CEN22LA164
<b>Date &amp; Time:</b>	March 31, 2022, 11:00 Local	<b>Registration:</b>	N21BS
<b>Aircraft:</b>	Mooney M20E	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Medical event	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

After a local flight, the airplane landed, and a witness saw the airplane taxi over a grass-covered area and then onto the ramp at a higher-than-normal speed. The airplane struck a parked airplane, and the left wing became wedged underneath the empennage of the parked airplane. Airport personnel responded and discovered that the pilot was slumped over the flight controls and unresponsive. Emergency responders attempted CPR, but the pilot did not recover and was transported to a hospital where he was declared deceased.

The airplane's left wing sustained substantial damage. Examination of the airplane's flight control, brake systems, and related systems did not reveal any mechanical anomalies that would have precluded normal operations.

The pilot's cause of death was atherosclerotic and hypertensive cardiovascular disease in association with obesity; the manner of death was reported as natural. There was significant cardiovascular disease identified by the autopsy without evidence of significant trauma. His cardiovascular conditions placed him at increased risk for a sudden cardiac event. Given the medical findings and the circumstances of this accident, it is likely that the pilot's incapacitation from a sudden cardiac event caused the accident.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's sudden cardiac event, which resulted in incapacitation, uncontrolled taxi after landing, and collision with a stationary parked airplane.

## Findings

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**Personnel issues**

Cardiovascular - Pilot

## Factual Information

### History of Flight

Taxi-from runway

Medical event (Defining event)

On March 31, 2022, about 1100 central daylight time, a Mooney M20E airplane, N21BS, was substantially damaged when it was involved in an accident near Kerrville, Texas. The pilot sustained fatal injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

After a local flight, the airplane landed at the Kerrville Municipal Airport (ERV). A witness saw the airplane taxi at a high speed, and it seemed to be out of control. The witness saw the airplane taxi over a grass-covered area and then onto the ramp. The airplane struck the empennage of a parked airplane (a Rockwell Commander, N25CE). The left wing of the Mooney became wedged underneath the empennage of the Rockwell Commander. Airport personnel responded and discovered that the unresponsive pilot was slumped over the flight controls. Medical personnel based on the airport began CPR, but the pilot did not respond. The pilot was transported to a hospital where he was declared deceased.

The airplane's left wing sustained substantial damage. Examination of the airplane's flight control and brake systems did not reveal any anomalies that would have precluded normal operations. The engine exhaust system was found normal and intact. The Commander's right horizontal stabilizer also sustained substantial damage.

The pilot's most recent Basic Med certificate was dated August 18, 2020. His third-class medical certificate expired in 2018. His most recent third-class medical examination was on August 31, 2016. During this examination, the pilot reported that he was taking medications for high cholesterol, high blood pressure, and low thyroid function.

An autopsy on the pilot was performed by the Travis County Medical Examiner, Austin, Texas. The cause death was atherosclerotic and hypertensive cardiovascular disease in association with obesity, and the manner of death was natural. Toxicology testing performed by the Travis County medical examiner's office was positive for the high blood pressure medication amlodipine in the pilot's femoral blood. This substance is generally considered non-impairing.

Toxicology testing performed by the Federal Aviation Administration's (FAA) Forensic Sciences laboratory detected amlodipine and propafenone in the pilot's heart blood and liver tissue. Propafenone is used to treat life-threatening irregular heartbeats; the medication itself can cause a new irregular heartbeat and increase the risk of death. The use of propafenone would require FAA review and approval.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	71, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Unmanned (sUAS)	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	BasicMed None	<b>Last FAA Medical Exam:</b>	August 18, 2020
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated) 3975 hours (Total, all aircraft), 3975 hours (Total, this make and model), 6 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Mooney	<b>Registration:</b>	N21BS
<b>Model/Series:</b>	M20E	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1975	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	21-1173
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	February 14, 2022 Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3948 Hrs as of last inspection	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO360 SER A&C
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	200 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>	KERV,1617 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	10:55 Local	<b>Direction from Accident Site:</b>	22°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	3 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	30°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.95 inches Hg	<b>Temperature/Dew Point:</b>	17°C / 2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Kerrville, TX (ERV)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Kerrville, TX	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:15 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	Kerrville Municipal Airport ERV	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	1616 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Fatal	<b>Latitude, Longitude:</b>	29.977431,-99.085614(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Lemishko, Alexander
<b>Additional Participating Persons:</b>	Jeff Johnson; FAA FSDO; San Antonio , TX
<b>Original Publish Date:</b>	February 8, 2024
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 3</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=104866">https://data.ntsb.gov/Docket?ProjectID=104866</a>

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](#).