



Aviation Investigation Final Report

Location: San Antonio, Texas Accident Number: GAA18CA224

Date & Time: April 16, 2018, 14:10 Local Registration: N6868

Aircraft: Mooney M20R Aircraft Damage: Substantial

Defining Event: Runway excursion **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

According to the pilot, the airplane encountered a tailwind gust during landing. He reported that he frequented the airport and that it was common practice to land with a tailwind because of the preferred up-sloping runway. He asserted that he underestimated the significance of the wind conditions and that, when the airplane touched down, it was too late to abort the landing. The ground speed was too fast, and the airplane exited the departure end of the runway and collided with an embankment.

The airplane sustained substantial damage to the left wing.

The METAR at the nearest airport, 2 nautical miles from the accident site, reported that, about the time of the accident, the wind was from 160° at 17 knots, gusting to 24 knots. The pilot landed on runway 30.

The pilot reported that there were no 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 landing long in tailwind conditions with insufficient runway remaining to stop the airplane.

Findings

Personnel issues Aircraft control - Pilot

Environmental issues Sloped/uneven terrain - Effect on equipment

Environmental issues Tailwind - Effect on equipment

Environmental issues Gusts - Effect on operation

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Factual Information

History of Flight

Landing	Other weather encounter
Landing-landing roll	Runway excursion (Defining event)
Landing-landing roll	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	78,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 4, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 6, 2018
Flight Time:	(Estimated) 19000 hours (Total, all aircraft), 40 hours (Total, this make and model), 19000 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N6868
Model/Series:	M20R NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	2005	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	29-0385
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	July 21, 2017 Annual	Certified Max Gross Wt.:	3368 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	390 Hrs	Engine Manufacturer:	CONT MOTOR
ELT:	C126 installed, not activated	Engine Model/Series:	IO-550-G7B
Registered Owner:	On file	Rated Power:	280 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Assident Citat	Viewel (VIAC)	Condition of Links	Davi
Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSAT,789 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	19:51 Local	Direction from Accident Site:	207°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	17 knots / 24 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.13 inches Hg	Temperature/Dew Point:	28°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LUFKIN, TX (LFK)	Type of Flight Plan Filed:	None
Destination:	San Antonio, TX (T94)	Type of Clearance:	VFR;VFR flight following
Departure Time:	12:20 Local	Type of Airspace:	Class C

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Airport Information

Airport:	TWIN-OAKS T94	Runway Surface Type:	Asphalt
Airport Elevation:	873 ft msl	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	2225 ft / 30 ft	VFR Approach/Landing:	Full stop;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:	29.570278,-98.46833(est)

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Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Christian Morales; FAA; San Antonio, TX
Original Publish Date:	October 24, 2018
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97085

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.

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