



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Manville, New Jersey	Accident Number:	ERA22LA179
Date & Time:	April 4, 2022, 12:50 Local	Registration:	N41XL
Aircraft:	Mooney M20M	Aircraft Damage:	Substantial
Defining Event:	Controlled flight into terr/obj (CFIT)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Business		

Analysis

The pilot reported that, prior to landing, he obtained weather information as specified on the instrument approach procedure chart, which was from an airport about 18 nm from the landing airport. The wind was reported as being from 350° at 7 knots, which favored runway 07. During landing, the airplane floated longer than anticipated and bounced upon touchdown. The pilot added power and elected to do a go-around maneuver; however, the airplane was unable to attain a sufficient rate of climb and impacted trees at the departure end of the runway, which resulted in substantial damage to the fuselage and right wing.

A witness stated that the weather obtained from the airport specified on the instrument approach plate did not match the conditions at the airport at the time of the accident, which included a 10-kt tailwind on runway 07. The nearest airport's weather observation system, about 7 miles from the accident airport, included wind at 310° at 11 kts gusting to 17 kts.

The pilot reported that there were no preimpact mechanical failures or malfunctions of 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 delayed go-around decision following an encounter with a tailwind during landing, which resulted in an inability to climb and subsequent impact with trees.

Findings

Personnel issues	Delayed action - Pilot
Personnel issues	Decision making/judgment - Pilot
Aircraft	Altitude - Attain/maintain not possible
Environmental issues	Tailwind - Contributed to outcome
Environmental issues	Tailwind - Effect on operation

Factual Information

History of Flight

Approach-VFR go-around	Controlled flight into terr/obj (CFIT) (Defining event)
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Pilot Information

Certificate:	Private	Age:	53,Male
Airplane Rating(s):	Single-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):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	December 13, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 8, 2022
Flight Time:	566 hours (Total, all aircraft), 462 hours (Total, this make and model), 525 hours (Pilot In Command, all aircraft), 70 hours (Last 90 days, all aircraft), 32 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N41XL
Model/Series:	M20M	Aircraft Category:	Airplane
Year of Manufacture:	2006	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	27-0355
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	August 2, 2021 Annual	Certified Max Gross Wt.:	3368 lbs
Time Since Last Inspection:	202.2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1586.8 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	TIO-540-AF1B
Registered Owner:	GUTHRIE GROUP INC	Rated Power:	270 Horsepower
Operator:	GUTHRIE GROUP INC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SMQ,99 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	12:53 Local	Direction from Accident Site:	328°
Lowest Cloud Condition:	Few / 4900 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 17 knots	Turbulence Type Forecast/Actual:	Unknown / Unknown
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	Unknown / Unknown
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	11°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Greensboro, NC (GSO)	Type of Flight Plan Filed:	IFR
Destination:	Manville, NJ	Type of Clearance:	IFR
Departure Time:	10:42 Local	Type of Airspace:	Class G

Airport Information

Airport:	Central Jersey Regional Airport 47N	Runway Surface Type:	Asphalt
Airport Elevation:	86 ft msl	Runway Surface Condition:	Dry;Holes;Rough;Rubber deposits
Runway Used:	7	IFR Approach:	RNAV
Runway Length/Width:	3507 ft / 50 ft	VFR Approach/Landing:	Go around

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	40.529424,-74.591201

Administrative Information

Investigator In Charge (IIC): Spencer, Lynn

Additional Participating Persons: Nathaniel Hill; FAA; Allentown, NJ

Original Publish Date: July 1, 2022

Last Revision Date:

Investigation Class: [Class 4](#)

Note: The NTSB did not travel to the scene of this accident.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=104893>

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](#).