



Aviation Investigation Final Report

Location:	Morristown, Tennessee	Accident Number:	ATL03LA046
Date & Time:	February 17, 2003, 19:45 Local	Registration:	N100DA
Aircraft:	Beech A36	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, as the flight descended from 8100 feet the airplane began to pick up structural ice. The flight was cleared to descend to 5100 feet, and the airplane continued to collect structural ice. As the airplane continued to descend the pilot added power to maintain altitude. While on final approach to runway 05 the airplane was unable to maintain altitude and collided with terrain. No mechanical or flight control malfunctions were reported by the pilot prior to the accident. According to the Saint Petersburg Flight Service Station, the pilot was given a full weather briefing that reported icing conditions at the destination airport.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight planning/decision to initiate flight into known adverse weather conditions, resulting in the in-flight encounter with weather and subsequent in-flight collision with terrain. A factor was airplane performance deteriorated due to structural ice.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: APPROACH

Findings

1. (C) WEATHER CONDITION - ICING CONDITIONS
 2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
 3. (F) FLIGHT INTO KNOWN ADVERSE WEATHER - INITIATED - PILOT IN COMMAND
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Occurrence #2: ALTITUDE DEVIATION, UNCONTROLLED
Phase of Operation: DESCENT - EMERGENCY

Findings

4. (F) AIRCRAFT PERFORMANCE - DETERIORATED
 5. (F) ALTITUDE - NOT MAINTAINED - PILOT IN COMMAND
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

6. TERRAIN CONDITION - GROUND

Factual Information

On February 17, 2003 at 1945 eastern standard time, a Beech A36, N100DA, registered to and operated by a private pilot, reported severe in-flight icing and collided with terrain during approach to Moore-Murrell Airport, Morristown, Tennessee. The personal flight was operated under the provisions of Title 14 CFR part 91 with an instrument flight plan filed. Instrument meteorological conditions prevailed at the time of the accident. The pilot and two passengers received minor injuries, and the airplane was substantially damaged. The flight originated from Clearwater Airpark, Clearwater, Florida, on February 17, 2003 at 1600.

According to the pilot, as the airplane descended from 8,100 feet it began to pick up structural ice. The flight was cleared to descend to 5,100 feet, and the airplane continued to collect structural ice. As the airplane descended the pilot added power to maintain altitude. While on final approach to runway 05 the airplane was unable to maintain altitude, and the pilot maneuvered the airplane to avoid buildings. The airplane collided with ground, and came to rest in an industrial park one mile southwest of the airport. No mechanical or flight control malfunctions were reported by the pilot prior to the accident.

According to the Saint Petersburg Flight Service Station, on February 17, 2003, the pilot of N100DA called at 1453 eastern standard time, to file two-instrument flight plans and receive a standard weather briefing. The specialist filed the flight plans in the Model 1 Full Capacity system (M1FC) and gave the weather briefing. During the briefing the specialist informed the pilot that an AIRMET ZULU for icing was in effect for the state of Tennessee, occasional moderate RIME, MIXED ICING below 12,000 feet, and the freezing level appears to be around 4500 feet.

Pilot Information

Certificate:	Private	Age:	46, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	June 3, 2002
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	June 21, 2001
Flight Time:	746 hours (Total, all aircraft), 167 hours (Total, this make and model), 687 hours (Pilot In Command, all aircraft), 93 hours (Last 90 days, all aircraft), 47 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N100DA
Model/Series:	A36	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	E-1670
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	October 2, 2002 Annual	Certified Max Gross Wt.:	2540 lbs
Time Since Last Inspection:	130 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3268 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520
Registered Owner:	Victor J. Osborne	Rated Power:	285 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night
Observation Facility, Elevation:	PIE,11 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	14:53 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	1400 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 2100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	1°C / 1°C
Precipitation and Obscuration:	Moderate - None - Ice crystals		
Departure Point:	CLEARWATER, FL (CLW)	Type of Flight Plan Filed:	IFR
Destination:	MORRISTOWN, TN (MOR)	Type of Clearance:	IFR
Departure Time:	16:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	MOORE-MURRELL MOR	Runway Surface Type:	
Airport Elevation:	1313 ft msl	Runway Surface Condition:	Unknown
Runway Used:	05	IFR Approach:	ILS
Runway Length/Width:	5701 ft / 100 ft	VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Minor	Latitude, Longitude:	36.179164,-83.375274

Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Mike Lonas; Nashville FSDO; Nashville , TN
Original Publish Date:	June 28, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=56498

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](#).