



National Transportation Safety Board Aviation Accident Final Report

Location:	Southbridge, MA	Accident Number:	ERA15LA266
Date & Time:	07/13/2015, 1430 EDT	Registration:	N1356R
Aircraft:	GRUMMAN AMERICAN AVN. CORP. AA 5	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	3 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airline transport pilot reported that, during takeoff from a 3,501-ft-long asphalt runway, a gust of wind yawed the airplane left at rotation and it became airborne. The pilot corrected for the yaw and was able to maintain runway heading; however, he chose to reject the takeoff rather than trying to continue. The airplane touched down and the pilot applied heavy braking, but was unable to stop the airplane before it continued off the runway and impacted trees and brush at the perimeter of the airport. Examination of the wreckage did not reveal any preimpact mechanical malfunctions. The reported wind at a nearby airport about the time of the accident was variable at 4 knots.

Probable Cause and Findings

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

The pilot's decision to abort the takeoff with insufficient runway remaining, which resulted in a runway excursion.

Findings

Personnel issues	Decision making/judgment - Pilot (Cause)
Environmental issues	

Factual Information

On July 13, 2015, about 1430 eastern daylight time, a Grumman American AA-5, N1356R, was substantially damaged during impact with trees following a runway excursion at the Southbridge Municipal Airport (3B0), Southbridge, Massachusetts. The airline transport pilot and two passengers were not injured. Visual meteorological conditions prevailed and no flight plan was filed for the local flight that was originating at the time of the accident. The personal flight was operated under the provisions of Title 14 Code of Federal Regulations Part 91.

Runway 02 was 3,501 feet long, 75 feet wide, and consisted of asphalt. The pilot stated that the preflight inspection and the taxi to runway 02 were normal. During the takeoff roll at about rotation speed, a gust of wind yawed the airplane to the left and it became airborne. The pilot corrected for the yaw and was able to maintain runway heading, but he elected to reject the takeoff as he felt it was the safer option, rather than trying to continue. The airplane touched back down and the pilot applied heavy braking, but was unable to stop before impacting trees and brush at the perimeter of the airport.

Examination of the airplane at the accident scene by a Federal Aviation Administration inspector revealed that it came to rest upright in an area of shrubbery and small trees, against the airport perimeter fence about 600 feet beyond the end of runway 02. The left wing sustained impact damage to the leading edge and upper surface, outboard of midspan. The right wing leading edge was damaged along the outer one-third of its span. The nose landing gear was separated from the fuselage. Examination of the airplane did not reveal any preimpact mechanical malfunctions, nor did the pilot report any.

The pilot held an airline transport pilot certificate with ratings for airplane single-engine land, airplane multiengine land, instrument airplane, and a type rating for the Boeing 737. He reported 21,623 total flight hours of experience, with 30 hours in the same make and model as the accident aircraft. His most recent first-class medical examination was performed on February 11, 2015.

The 1454 recorded weather observation at Worcester Regional Airport, located 12 miles northeast of 3B0, included variable wind direction at 4 knots, visibility 10 statute miles, temperature 27 degrees C, dew point 16 degrees C, few clouds at 3,800 feet above ground level, and the altimeter setting was 29.93 inches of mercury.

History of Flight

Takeoff	Miscellaneous/other (Defining event)
Takeoff-rejected takeoff	Runway excursion Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline Transport; Flight Engineer	Age:	60, Male
Airplane Rating(s):	Multi-engine Land; 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:	No
Medical Certification:	Class 1 With Waivers/Limitations	Last FAA Medical Exam:	02/11/2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	05/09/2015
Flight Time:	21623 hours (Total, all aircraft), 30 hours (Total, this make and model), 21323 hours (Pilot In Command, all aircraft), 191 hours (Last 90 days, all aircraft), 61 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GRUMMAN AMERICAN AVN. CORP.	Registration:	N1356R
Model/Series:	AA 5 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	1975	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	AA5-0756
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	07/21/2015, Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	55 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2093 Hours at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, not activated	Engine Model/Series:	O-320
Registered Owner:	On file	Rated Power:	150 hp
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KORH, 1017 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	1454 EDT	Direction from Accident Site:	37°
Lowest Cloud Condition:	Few / 3800 ft agl	Visibility	10 Miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	27° C / 16° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Southbridge, MA (3B0)	Type of Flight Plan Filed:	None
Destination:	Southbridge, MA (3B0)	Type of Clearance:	None
Departure Time:	1430 EDT	Type of Airspace:	

Airport Information

Airport:	SOUTHBRIDGE MUNI (3B0)	Runway Surface Type:	Asphalt
Airport Elevation:	699 ft	Runway Surface Condition:	Dry
Runway Used:	02	IFR Approach:	None
Runway Length/Width:	3501 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	42.107222, -72.036944 (est)

Administrative Information

Investigator In Charge (IIC):	Douglass P Brazy	Report Date:	09/11/2018
Additional Participating Persons:	William DeKine; FAA/FSDO; Enfield, CT		
Publish Date:	09/11/2018		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=91549		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).