



National Transportation Safety Board Aviation Accident Final Report

Location:	Barre Plains, Massachusetts	Accident Number:	ERA18LA136
Date & Time:	April 26, 2018, 17:15 Local	Registration:	N87266
Aircraft:	Cessna 402	Aircraft Damage:	Substantial
Defining Event:	Runway excursion	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot was conducting a local, personal flight. The pilot reported that he checked the weather conditions at three local airports before the flight but stated that he did not trust the wind reports. He added that he did not get a preflight weather briefing. Once at the destination airport, he conducted two go-arounds due to gusting wind conditions. During the third attempted landing, he made a steep approach at a normal approach speed and flared the airplane about midway down the 3,000-ft-long runway. The airplane floated down the runway for much longer than the pilot expected before touching down. Despite applying maximum braking, there was insufficient remaining runway to stop, and the airplane skidded off the runway, impacted trees, and subsequently caught fire, which resulted in substantial damage to the airframe.

The wind conditions reported at an airport located about 13 miles away included a tailwind of 16 knots, gusting to 27 knots. Given the tailwind conditions reported at this airport and the pilot's description of the approach and landing, it is likely that the pilot conducted the approach to the runway in a tailwind that significantly increased the airplane's groundspeed, which resulted in a touchdown with insufficient runway remaining to stop the airplane, even with maximum braking.

Probable Cause and Findings

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

The pilot's improper decision to land with a tailwind, which resulted in a touchdown with insufficient runway remaining to stop the airplane.

Findings

Personnel issues	Aircraft control - Pilot
Environmental issues	Tailwind - Decision related to condition
Personnel issues	Decision making/judgment - Pilot
Environmental issues	Tailwind - Effect on operation

Factual Information

On April 26, 2018, about 1715 eastern daylight time, a Cessna 402B, N87266, was substantially damaged during landing at Tanner-Hiller Airport (8B5), Barre Plains, Massachusetts. The private pilot and two passengers were not injured. No flight plan was filed for the local personal flight that was conducted under the provisions of Title 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed at the time of the accident. The flight departed Dillant-Hopkins Airport (EEN), Keene, New Hampshire, about 1630.

According to the pilot, he was trying to land at 8B5 in gusty wind conditions and performed two go-arounds prior to landing on runway 06. He said the wind was "bumpy" below the trees, and he made a steep approach to the runway "consistent with a short field landing." He flared about midfield, and the airplane continued to float down the runway. He stated the airplane "floated and floated much further down the runway than normal" even though he approached the runway at a "normal" airspeed of 95 knots and with full flaps. The airplane touched down and despite maximum braking, overran the departure end of runway 06, and impacted trees. The pilot and passengers egressed the airplane before a post-impact fire ensued.

The pilot stated that he believed he encountered a wind rotor over the trees, which changed the direction of the wind to a quartering tailwind. He checked the weather at three surrounding airports, but he did not trust the wind reports. He did not get a weather briefing before the flight.

A FAA inspector examined the airplane where it came to rest, about 300 ft past the end of the 3,027 ft-long runway. The left wing outboard of the left engine impacted trees. The left wingtip was separated, and the left horizontal stabilizer was damaged. All major components were accounted for at the scene and all flight controls were functional.

According to FAA records, the pilot held a private pilot certificate with ratings for airplane single-engine and multi-engine land airplane. His most recent FAA third-class airman medical certificate was issued December 7, 2009. A review of the pilots logbooks revealed he had about 330 hours of total flight time and 220 hours of multi-engine flight time.

At 1654, the weather conditions reported at Worcester Regional Airport (ORH), about 13 miles southeast of 8B5, included wind from 270° at 16 knots gusting to 27 knots, visibility 10 statute miles, scattered clouds at 4,500 ft, temperature 14°C, dew point 4°C, and an altimeter setting of 29.70 inches of mercury.

History of Flight

Landing	Landing area overshoot
Landing-landing roll	Runway excursion (Defining event)
Landing-landing roll	Collision with terr/obj (non-CFIT)
Post-impact	Fire/smoke (post-impact)

Pilot Information

Certificate:	Private	Age:	30, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	December 7, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 10, 2011
Flight Time:	330 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N87266
Model/Series:	402 B	Aircraft Category:	Airplane
Year of Manufacture:	1976	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	402B1097
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	May 24, 2016 Annual	Certified Max Gross Wt.:	6301 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	9193 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520 SER
Registered Owner:		Rated Power:	325 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ORH, 1017 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	16:54 Local	Direction from Accident Site:	114°
Lowest Cloud Condition:	Scattered / 4500 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	16 knots / 27 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.7 inches Hg	Temperature/Dew Point:	14° C / 4° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Barre Plains, MA (8B5)	Type of Flight Plan Filed:	None
Destination:	Barre Plains, MA (8B5)	Type of Clearance:	None
Departure Time:	16:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	TANNER-HILLER 8B5	Runway Surface Type:	Asphalt
Airport Elevation:	589 ft msl	Runway Surface Condition:	Dry
Runway Used:	06	IFR Approach:	None
Runway Length/Width:	3027 ft / 40 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	42.230442,-71.529861(est)

Administrative Information

Investigator In Charge (IIC):	Hill, Millicent
Additional Participating Persons:	Michael Newman; FAA/FSDO; Bradley, CT
Original Publish Date:	November 6, 2019
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97121

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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](#).