



Aviation Investigation Final Report

Location:	Dallas, Texas	Accident Number:	GAA18CA413
Date & Time:	July 9, 2018, 10:30 Local	Registration:	N6849C
Aircraft:	Beech T34	Aircraft Damage:	Substantial
Defining Event:	Aerodynamic stall/spin	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot receiving instruction reported that, during an airplane checkout, he performed a simulated engine failure. He added that, during the landing flare, the airplane "ran out of energy," and the right wing struck the runway.

The flight instructor reported that, about 5 ft above the runway, the airplane aerodynamically stalled, and the right wing dropped and struck the runway.

The airplane sustained substantial damage to the right wing.

The flight instructor reported that there were no preaccident mechanical failures or malfunctions 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 failure to maintain adequate airspeed and his exceedance of the airplane's critical angle of attack during the landing flare, which resulted in an aerodynamic stall.

Findings

Personnel issues	Aircraft control - Student/instructed pilot
Aircraft	Angle of attack - Capability exceeded
Aircraft	Airspeed - Not attained/maintained

Factual Information

History of Flight

Landing	Aerodynamic stall/spin (Defining event)
----------------	---

Flight instructor Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	53, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	September 22, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 7, 2018
Flight Time:	(Estimated) 20478 hours (Total, all aircraft), 31.6 hours (Total, this make and model), 14518 hours (Pilot In Command, all aircraft), 138.6 hours (Last 90 days, all aircraft), 46.4 hours (Last 30 days, all aircraft)		

Pilot Information

Certificate:	Airline transport; Commercial	Age:	45, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	October 11, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 22, 2018
Flight Time:	(Estimated) 12311 hours (Total, all aircraft), 3043 hours (Pilot In Command, all aircraft), 184 hours (Last 90 days, all aircraft), 46 hours (Last 30 days, all aircraft), 7.5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N6849C
Model/Series:	T34 A	Aircraft Category:	Airplane
Year of Manufacture:	1954	Amateur Built:	
Airworthiness Certificate:	Aerobatic; Normal	Serial Number:	G-118
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	May 10, 2018 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5333.2 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	C91A installed, not activated	Engine Model/Series:	O-470-13A
Registered Owner:		Rated Power:	225 Horsepower
Operator:		Operating Certificate(s) Held:	Other operator of large aircraft

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KRBD, 658 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	15:53 Local	Direction from Accident Site:	131°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 9000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	30°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Dallas, TX (RBD)	Type of Flight Plan Filed:	None
Destination:	Dallas, TX (RBD)	Type of Clearance:	VFR; Traffic advisory
Departure Time:	09:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	DALLAS EXECUTIVE RBD	Runway Surface Type:	Concrete
Airport Elevation:	659 ft msl	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	6451 ft / 100 ft	VFR Approach/Landing:	Full stop;Simulated forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	32.684444,-96.872779(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Steve Sheridan; FAA; North Texas, TX
Original Publish Date:	March 18, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97739

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](#).