Aviation Investigation Final Report

Location:	Nashville, Tennessee	**Accident Number:**	ERA20CA296
Date & Time:	August 24, 2020, 10:16 Local	**Registration:**	N8629M
Aircraft:	Beech 55	**Aircraft Damage:**	Substantial
Defining Event:	Abnormal runway contact	**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The commercial pilot was on her second flight of multi-engine flight instruction as she completed an approach and flared the airplane for landing. The instructor said his attention was "outside" as he monitored the airplane's height, drift, runway alignment, and guarded the throttles.

The airplane suddenly landed hard, bounced back into the air, and did not respond as expected to the instructor's remedial actions. The engines responded to an increase in throttle for a go-around, but there was no corresponding increase in thrust. The airplane drifted to its left, and the instructor chose to close the throttles, and perform a controlled landing. The airplane departed the runway surface and came to rest in the grass infield with substantial damage to the fuselage forward of the cockpit.

According to the instructor, there were no deficiencies in the performance and handling of the airplane. The student pilot had experienced a negative habit transfer from her experience in the airplane she was accustomed to flying as the configuration of its throttle quadrant differed from the accident airplane and she had inadvertently reduced (feathered) the propellers rather than reducing the throttles while landing.

Probable Cause and Findings

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

The pilot's inadvertent feathering of the propellers during the landing flare, which resulted in a

hard landing. A factor in the accident was the instructor's failure to fully monitor the pilot's manipulation of the levers in the airplane's non-standard throttle quadrant.

Findings

Personnel issues	Identification/recognition - Pilot
Personnel issues	Monitoring other person - Instructor/check pilot
Aircraft	Propeller feather/reversing - Incorrect use/operation

Factual Information

History of Flight

Landing-flare/touchdown	Abnormal runway contact (Defining event)
Landing-flare/touchdown	Runway excursion

Pilot Information

Certificate:	Commercial	**Age:**	48,Female
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	October 8, 2019
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	307.1 hours (Total, all aircraft), 3 hours (Total, this make and model), 307.1 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 28 hours (Last 30 days, all aircraft), 1.2 hours (Last 24 hours, all aircraft)		

Flight instructor Information

Certificate:	Airline transport; Commercial; Flight engineer; Flight instructor	**Age:**	59,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	Lap only
Instrument Rating(s):	Airplane; Helicopter	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 1 With waivers/limitations	**Last FAA Medical Exam:**	April 17, 2020
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	December 23, 2019
Flight Time:	22537 hours (Total, all aircraft), 29.2 hours (Total, this make and model), 126 hours (Last 90 days, all aircraft), 61.7 hours (Last 30 days, all aircraft), 2.4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N8629M
Model/Series:	55 95A55	**Aircraft Category:**	Airplane
Year of Manufacture:	1963	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	TC-498
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	November 2, 2019 Annual	**Certified Max Gross Wt.:**	4880 lbs
Time Since Last Inspection:	51 Hrs	**Engines:**	2 Reciprocating
Airframe Total Time:	5404.3 Hrs as of last inspection	**Engine Manufacturer:**	Continental
ELT:	C91 installed, not activated	**Engine Model/Series:**	IO-470-L
Registered Owner:	On file	**Rated Power:**	260 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:	BNA,605 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	09:53 Local	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.15 inches Hg	**Temperature/Dew Point:**	28°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Gallatin, TN (XNX)	**Type of Flight Plan Filed:**	None
Destination:	Nashville, TN (BNA)	**Type of Clearance:**	VFR
Departure Time:	10:03 Local	**Type of Airspace:**	Class C

Airport Information

Airport:	NASHVILLE INTL BNA	**Runway Surface Type:**	Concrete
Airport Elevation:	599 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	20C	**IFR Approach:**	None
Runway Length/Width:	8001 ft / 150 ft	**VFR Approach/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:**	36.124443,-86.678054(est)

Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	Aaron deVogel; FAA/FSDO; Nashville, TN
Original Publish Date:	June 24, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=101853