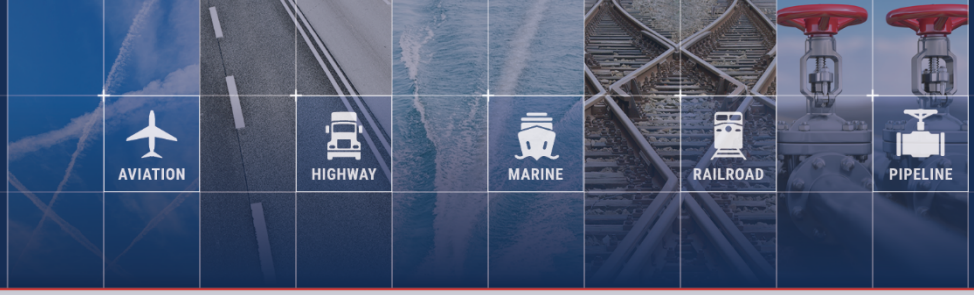

Aviation Investigation Final Report

Location:	Wichita, Kansas	**Accident Number:**	CEN23LA198
Date & Time:	May 23, 2023, 13:45 Local	**Registration:**	N49RH
Aircraft:	TEXTRON AVIATION INC 172S	**Aircraft Damage:**	Substantial
Defining Event:	Prop/jet/rotor blast/suction	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The student pilot reported that, during taxi on taxiway A1 in a Cessna 172, a nearby turbine-powered Embraer Phenom airplane parked in the run-up area for taxiway blocked his path to the runway. After completing his pre-takeoff checklist, the student pilot radioed the Phenom crew and asked “if [he] could proceed and sneak behind them to the runway”. The Phenom crew replied, “that should be fine” and the pilot then proceeded to taxi behind the Phenom. As the Cessna taxied behind the Phenom, the jet blast lifted the airplane onto its propeller and left wing which resulted in substantial damage to the left wing.

The Phenom maintenance crew reported they were conducting a high-power engine run and did not know that an airplane was trying to taxi behind them on taxiway A1. During the student pilot’s initial radio call, a turbine powered Beechjet airplane was taxiing the opposite direction on the taxiway and because the student pilot of the accident airplane did not identify himself with the airplane’s callsign, the maintenance crew assumed the radio call came from the Beechjet.

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 a safe taxi distance from a turbine-powered airplane, resulting in an encounter of the turbine-powered airplane’s jet blast while taxiing.

Findings

Personnel issues	Incorrect action performance - Pilot
Personnel issues	Aircraft control - Pilot
Aircraft	Taxiing - Incorrect use/operation
Personnel issues	Accuracy of communication - Pilot
Personnel issues	Interpretation/understanding - Pilot

Factual Information

History of Flight

Taxi	Prop/jet/rotor blast/suction (Defining event)

Pilot Information

Certificate:	Private	**Age:**	25,Male
Airplane Rating(s):	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:**	
Medical Certification:	Class 1 Without waivers/limitations	**Last FAA Medical Exam:**	December 14, 2018
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	96 hours (Total, all aircraft), 96 hours (Total, this make and model), 43 hours (Pilot In Command, all aircraft), 36 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	TEXTRON AVIATION INC	**Registration:**	N49RH
Model/Series:	172S	**Aircraft Category:**	Airplane
Year of Manufacture:	2023	**Amateur Built:**	
Airworthiness Certificate:	Normal; Utility	**Serial Number:**	172S12932
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	April 5, 2023 100 hour	**Certified Max Gross Wt.:**	2550 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	241 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	IO-360-L2A
Registered Owner:	Christiansen Aviation, LLC	**Rated Power:**	180 Horsepower
Operator:	Wichita State University Campus of Applied Sciences and Technology	**Operating Certificate(s) Held:**	Pilot school (141)
Operator Does Business As:	WSU Tech	**Operator Designator Code:**	SHXS

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KAAO,1404 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	13:54 Local	**Direction from Accident Site:**	162°
Lowest Cloud Condition:		**Visibility**	10 miles
Lowest Ceiling:	Broken / 6000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	110°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.03 inches Hg	**Temperature/Dew Point:**	26°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Wichita, KS (KAAO)	**Type of Flight Plan Filed:**	None
Destination:	Nevada, MO (KNVD)	**Type of Clearance:**	None
Departure Time:	13:30 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	Col. James Jabara KAAO	**Runway Surface Type:**	
Airport Elevation:	1421 ft msl	**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	37.755963,-97.221403

Administrative Information

Investigator In Charge (IIC):	Finne, Andrew
Additional Participating Persons:	Arena, Duane; FAA-FSDO; Witchita, KS
Original Publish Date:	August 10, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=192227