



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Miami, Florida	<b>Accident Number:</b>	ERA24LA062
<b>Date &amp; Time:</b>	December 8, 2023, 12:02 Local	<b>Registration:</b>	N955PT
<b>Aircraft:</b>	Cessna 172M	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Prop/jet/rotor blast/suction	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The flight crew of a business jet airplane had taxied to a runup area on the airport after their airplane had been over-fueled, as they needed to burn off the excess fuel before they could depart. The crew did not otherwise specifically advise air traffic control that they would be performing a high-power engine run for an extended duration. The exhaust of the business jet's engines was directed toward a taxiway that passed behind the runup area. The flight instructor and student pilot onboard the accident airplane reported that, as they taxied toward the runup area and behind the business jet, their airplane was blown across the taxiway by the jet blast from the business jet, resulting in substantial damage to the airplane's left wing when it contacted the ground.

## Probable Cause and Findings

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

The business jet flight crew's failure to appropriately position their airplane to mitigate the impact of their extended duration, high-power engine run, and their failure to adequately communicate these factors to air traffic control, which resulted in the accident airplane encountering their jet blast while taxiing.

## Findings

Personnel issues	Accuracy of communication - Pilot of other aircraft
Personnel issues	Understanding/comprehension - Pilot of other aircraft

## Factual Information

### History of Flight

Taxi	Prop/jet/rotor blast/suction (Defining event)
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### Flight instructor Information

Certificate:	Commercial; Flight instructor; Private	Age:	30,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	May 18, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 29, 2023
Flight Time:	1557 hours (Total, all aircraft), 870 hours (Total, this make and model), 1481 hours (Pilot In Command, all aircraft), 114 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 30 hours (Last 24 hours, all aircraft)		

### Student pilot Information

Certificate:	Student	Age:	18,Female
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	July 6, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	51 hours (Total, all aircraft), 51 hours (Total, this make and model), 51 hours (Last 90 days, all aircraft), 23 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N955PT
<b>Model/Series:</b>	172M	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1974	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	17264573
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	December 5, 2023 Annual	<b>Certified Max Gross Wt.:</b>	2300 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	14322 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320-E2D
<b>Registered Owner:</b>	PILOT TRAINING CENTER LLC	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	PILOT TRAINING CENTER LLC	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	TMB,10 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	11:53 Local	<b>Direction from Accident Site:</b>	0°
<b>Lowest Cloud Condition:</b>	Scattered / 3800 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 4800 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	13 knots / 18 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	100°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.15 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 18°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Miami, FL	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Miami, FL	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	Miami Executive Airport TMB	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	10 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	25.649375,-80.436578(est)

## Administrative Information

Investigator In Charge (IIC):	Gunther, Todd
Additional Participating Persons:	Michael Torrent; FAA/FSDO; Miramar, FL
Original Publish Date:	July 2, 2024
Last Revision Date:	
Investigation Class:	<a href="#">Class 4</a>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=193509">https://data.nts.gov/Docket?ProjectID=193509</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).