



Aviation Investigation Final Report

Location:	Altoona, Pennsylvania	Accident Number:	ERA20CA120
Date & Time:	February 29, 2020, 12:35 Local	Registration:	N721EC
Aircraft:	Learjet 35	Aircraft Damage:	Substantial
Defining Event:	Abnormal runway contact	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

The flight crew reported that, after an instrument landing system approach and during the landing flare, the airplane encountered a strong wind gust that pushed the airplane toward the edge of the runway, so they initiated a go-around. During the go-around, the left-wing tip tank struck the runway. The flight crew diverted to another airport where the weather conditions were more favorable, and after landing, examination of the airplane revealed that the left wing had sustained substantial damage. The calculated crosswind component was 18 knots at the time of landing. According to the Airplane Flight Manual, the maximum demonstrated crosswind component was 24.7 knots.

Probable Cause and Findings

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

The pilot flying's improper lateral bank control during a go-around in gusting wind conditions, which resulted in the left-wing tip tank striking the runway.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Lateral/bank control - Not attained/maintained
Environmental issues	Gusts - Effect on operation

Factual Information

History of Flight

Landing-flare/touchdown	Other weather encounter
Landing-flare/touchdown	Loss of control on ground
Approach-VFR go-around	Abnormal runway contact (Defining event)

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	57, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	February 11, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 11, 2019
Flight Time:	6240 hours (Total, all aircraft), 1750 hours (Total, this make and model), 5495 hours (Pilot In Command, all aircraft), 114 hours (Last 90 days, all aircraft), 79 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Airline transport	Age:	70, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
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 With waivers/limitations	Last FAA Medical Exam:	April 23, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 30, 2019
Flight Time:	33000 hours (Total, all aircraft), 3750 hours (Total, this make and model), 26210 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Learjet	Registration:	N721EC
Model/Series:	35 A	Aircraft Category:	Airplane
Year of Manufacture:	1980	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	355
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	August 22, 2019 Continuous airworthiness	Certified Max Gross Wt.:	18001 lbs
Time Since Last Inspection:		Engines:	2 Turbo fan
Airframe Total Time:	14859 Hrs at time of accident	Engine Manufacturer:	Honeywell
ELT:	C126 installed, not activated	Engine Model/Series:	TFE731-2C-2B
Registered Owner:	East Coast Jets Inc.	Rated Power:	3500 Lbs thrust
Operator:	East Coast Jets Inc	Operating Certificate(s) Held:	On-demand air taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	A00,1503 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	12:35 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:	Broken / 1600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 20 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	-4°C / -9°C
Precipitation and Obscuration:	Light - None - Snow		
Departure Point:	Allentown, PA (ABE)	Type of Flight Plan Filed:	IFR
Destination:	Altoona, PA (A00)	Type of Clearance:	IFR
Departure Time:	12:06 Local	Type of Airspace:	Class E

Airport Information

Airport:	Altoona-Blair County AOO	Runway Surface Type:	Asphalt
Airport Elevation:	1503 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	ILS
Runway Length/Width:	5465 ft / 100 ft	VFR Approach/Landing:	None

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:	40.29639,-78.319999(est)

Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Robert Ference; FAA/ FSDO; Allentown, PA
Original Publish Date:	September 21, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=101041

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