

Aviation Investigation Final Report

Location: Farmingdale, New Jersey Accident Number: ERA20CA113

Date & Time: February 25, 2020, 23:56 Local Registration: N135LR

Aircraft: Learjet 55 Aircraft Damage: Substantial

Defining Event: Runway excursion **Injuries:** 5 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled

Analysis

The pilot reported that he and the copilot were conducting an instrument approach to the runway in a business jet. He noted that the weather conditions included fog and mist. After touching down about 1,500 ft down the 7,300-ft-long runway, he engaged the thrust reversers and applied the brakes gradually because the runway was "slippery." As the airplane approached the end of the runway, he applied full braking, but the airplane departed the end of the runway and impacted a ditch, which resulted in the forward landing gear breaking and the airplane nosing down. The copilot corroborated the pilot's statement. The fuselage was substantially damaged. The pilot reported that there were no preaccident mechanical malfunctions or failures 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 flight crew's failure to stop the airplane on the available runway, which was wet and resulted in the airplane impacting a ditch.

Findings

Personnel issues Aircraft control - Flight crew

Aircraft Landing distance - Capability exceeded

Environmental issues Wet surface - Effect on operation

Environmental issues Sloped/uneven terrain - Effect on operation

Personnel issues Delayed action - Flight crew

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Factual Information

History of Flight

Landing	Other weather encounter
Landing	Runway excursion (Defining event)
Landing	Collision during takeoff/land
Landing	Landing gear collapse
Landing	Nose over/nose down

Pilot Information

Certificate:	Airline transport	Age:	68,Male
Airplane Rating(s):	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):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	November 19, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 13, 2020
Flight Time:	18288 hours (Total, all aircraft), 2909.8 hours (Total, this make and model), 8713 hours (Pilot In Command, all aircraft)		

Co-pilot Information

Airline transport	Age:	63,Male
Single-engine land; Multi-engine land	Seat Occupied:	Right
None	Restraint Used:	4-point
Airplane	Second Pilot Present:	Yes
None	Toxicology Performed:	No
Class 1 Without waivers/limitations	Last FAA Medical Exam:	November 19, 2019
Yes	Last Flight Review or Equivalent:	February 13, 2020
(Estimated) 14759 hours (Total, all aircraft), 1978.9 hours (Total, this make and model), 104.3 hours (Last 90 days, all aircraft), 35.5 hours (Last 30 days, all aircraft), 1.5 hours (Last 24 hours, all aircraft)		
	Single-engine land; Multi-engine land None Airplane None Class 1 Without waivers/limitations Yes (Estimated) 14759 hours (Total, all a hours (Last 90 days, all aircraft), 35.	Single-engine land; Multi-engine land None Restraint Used: Airplane Second Pilot Present: Toxicology Performed: Class 1 Without waivers/limitations Yes Last Flight Review or Equivalent: (Estimated) 14759 hours (Total, all aircraft), 1978.9 hours (Total, this makhours (Last 90 days, all aircraft), 35.5 hours (Last 30 days, all aircraft), 1.5

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Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Passenger Information

Certificate:		Age:	
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

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Aircraft and Owner/Operator Information

Aircraft Make:	Learjet	Registration:	N135LR
Model/Series:	55 Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	1982	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	068
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	November 18, 2019 Continuous airworthiness	Certified Max Gross Wt.:	21500 lbs
Time Since Last Inspection:		Engines:	2 Turbo fan
Airframe Total Time:	12792.3 Hrs as of last inspection	Engine Manufacturer:	Garret
ELT:	Installed	Engine Model/Series:	TFG 731-3AR-2
Registered Owner:	Expectra Aviation Inc	Rated Power:	3800 Lbs thrust
Operator:	NORTHWEST AIRCRAFT RENTAL INC	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Upper Jets	Operator Designator Code:	GLRA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	BLM,153 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	23:56 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:		Visibility	6 miles
Lowest Ceiling:	Broken / 600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.85 inches Hg	Temperature/Dew Point:	8°C / 8°C
Precipitation and Obscuration:	Light - Showers - Rain		
Departure Point:	Richmond, VA (RIC)	Type of Flight Plan Filed:	IFR
Destination:	Farmingdale, NJ (BLM)	Type of Clearance:	IFR
Departure Time:	23:00 Local	Type of Airspace:	Class E

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Airport Information

Airport:	Monmouth Executive BLM	Runway Surface Type:	Asphalt
Airport Elevation:	153 ft msl	Runway Surface Condition:	Wet
Runway Used:	14	IFR Approach:	RNAV
Runway Length/Width:	7345 ft / 85 ft	VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	40.186668,-74.124443(est)

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Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Richard T Rohrig; FAA/FSDO; Teterboro, NJ
Original Publish Date:	August 27, 2020
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=101002

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.

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