



National Transportation Safety Board Aviation Accident Final Report

Location:	Fort Lauderdale, FL	Accident Number:	MIA04FA107
Date & Time:	07/19/2004, 1137 EDT	Registration:	N55LF
Aircraft:	Learjet 55	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Positioning

Analysis

The flight was a VFR positioning flight from FLL to FXE. Transcripts of the cockpit voice recorder (CVR) showed that while waiting for takeoff from FLL the flightcrew heard the local controller reported to a Delta Airlines flight that was on a seven mile final approach to land on runway 27R that the winds were 250 degrees at 19 knots, gusting to 50 knots. The Delta Airlines flight crew then informed the controller they were making a missed approach. At 1130:05 the captain asks the first officer if "can you see the end of the weather? If we make a hard right turn, can we stay clear of it?" The first officer responded "I believe so." At 1130:06 the local controller reported "wind shear alert. The centerfield wind 230 at 22. Runway 27R departure 25 knot loss one mile departure." The captain stated to the first officer "sweet." At 1132:11 the captain transmitted to the local controller "tower, any chance of Hop-a-Jet 55 getting out of here?" The local controller responded wind 230 at 17, right turn direct FXE approved, runway 27R cleared for takeoff. The captain responded "cleared to go, right turn out." At 1133:10 the captain asks for gear up. At 1133:15 the local controller responded to a Southwest Airlines Flight waiting for takeoff "no, don't look like anyone's gonna go." "The uh, weather is due west moving rapidly to the north. It looks like a few minutes, and you all be in the clear straight out." At 1133:17, the captain stated to the first officer "oh #. Think this was a bad idea." The first officer responded "no airport in sight." At 1133:43 the sound similar to precipitation hitting the windshield is recorded. At 1133:46 the FLL local controller instructs the flight crew to contact FXE Tower. At 1133:54 the CVR records the FXE local controller transmitting "wind 200, variable 250 at 15, altimeter 29.99. Heavy cell of weather to the west moving eastbound. Low level wind shear possible. At 1134:16, the FXE local controller transmits "attention all aircraft, low level wind shear advisories are in effect. Use caution. Wind 240 at 10." At 1134:51, the first officer transmitted to the FXE local controller that the flight was over the shoreline inbound full stop. At 1135:02, the FXE local controller transmitted "Hop-a-Jet 55, Executive tower, wind 210 variable 250 at 35, 35 knots and gusting. Winds are uh, heavy on the field. Low level wind shear advisories are in effect. Heavy rains from the west, eastbound and would you like to proceed inbound and land Executive? Say intentions." The first officer responded "that's affirmative." The local controller responded, "Hop-a-Jet 55 straight in runway three one if able. The winds 230 gusts, correction, winds 230 variable 210 at 25." At 1135:48, the local controller transmitted, "Hop-a-Jet 55, wind 230 variable 300 at 25

gusts 35. Altimeter 30.00. Runways are wet. Traffic is exiting the runway prior to your arrival, a Dutchess. Caution standing water on runways. Low level wind shear advisories in effect, Runway 31. Cleared to land." The first officer responded "cleared to land, Hop-a-Jet 55." At 1136:35, the local controller transmitted "wind 230 at 25, gusts 35." At 1136:58, the CVR records the sound similar to precipitation on the windshield. At 1137:17, the CVR records a sound similar to the aircraft touching down on the runway. At 1137:19, the sound of a repetitive tone similar to the thrust reverser warning starts and continues to the end of the recording. At 1137:23 a loud unidentified roaring sound starts and lasts 8 seconds. At 1137:30, loud rumbling noises similar to the aircraft departing the runway start. At 1137:36, a continuous tone similar to landing gear warning signal sounds and continues to the end of the recording. The rumbling noises stop. At 1137:39 the captain states the thrust reversers didn't stow and at 1138:36, the captain states "I went around and the # TRs stayed. The CVR recording ended. The 1132, Goes-12 infrared image depicts a rapidly developing cumulonimbus cloud between and over the FLL and FXE airports. The top of the cloud over FXE was in the range of 22,000 feet. The top of the cloud southwest of FXE was in the 39,000 feet range. The 1145, Goes-12 infrared image depicts a developing cumulonimbus cloud over FXE with the cloud top in the 42,000 feet range. Data was obtained from the Melbourne, Florida Doppler Weather Radar System, located 118 miles north-northwest of the accident site. The data showed that at FXE, between 1130 and 1145, a VIP Level 1 to 2 echo evolved into a VIP Level 5 "intense" echo at 1135 and a VIP Level 6 "extreme" echo by 1145.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight crew's decision to continue the approach into known area of potentially severe weather (Thunderstorm), which resulted in the flight encountering a 30 knot cross wind, heavy rain, low-level wind shear, and hydroplaning on a ungrooved contaminated runway.

Findings

Occurrence #1: OVERRUN
Phase of Operation: LANDING - ROLL

Findings

1. WEATHER CONDITION - THUNDERSTORM
2. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - FLIGHTCREW
3. (C) FLIGHT INTO ADVERSE WEATHER - CONTINUED - FLIGHTCREW
4. AIRCRAFT PERFORMANCE, HYDROPLANING CONDITION - ENTERED
5. BRAKES(NORMAL) - DIMINISHED
6. RUN ON LANDING

Factual Information

History of Flight

On July 19, 2004, about 1137 eastern standard time, a Gates Learjet 55, N55LF, registered to 55-112, LLC and operated by Hop-A-Jet Inc., as a Title 14 CFR Part 91 positioning flight, overran runway 31 during landing roll at the Fort Lauderdale Executive Airport (FXE), Fort Lauderdale, Florida. Visual meteorological conditions prevailed prior to the accident and no flight plan was filed. The airline transport-rated captain and the commercial-rated first officer reported no injuries, and the airplane incurred substantial damage. The flight originated from the Fort Lauderdale-Hollywood International Airport (FLL), Fort Lauderdale, Florida, the same day, about 1133.

The captain stated the flight was intended to be a simple reposition of a Lear 55, N55LF from FLL to FXE. They departed FLL with their eyes on the weather, which was building to the west and southwest of the Fort Lauderdale area, intending to land at FXE prior to the arrival of the rain. Unfortunately, after an uneventful and quick flight, the weather impacted the active runway at FXE (runway 31) just as, or possibly seconds before their touchdown. Brakes and thrust reversers were applied immediately upon contact with the ground and it was quickly very obvious that due to one, or any combination of factors, the brakes were going to be completely ineffective. The decision was then made to attempt a go-around maneuver. Again, due to one or more factors, they were unable to attain liftoff speed and exited the runway which destroyed the aircraft.

The first officer stated that after a reposition flight from FLL to FXE, they were cleared to land on runway 31 at FXE. Visual meteorological conditions existed at the time of approach to touchdown, at which point, a fast moving thunderstorm enveloped the aircraft and subsequently degraded the landing surface with heavy rainfall. Heavy braking and the deployment of thrust reversers were unable to stop the aircraft in the available landing distance. The aircraft departed the end of the runway 31 and came to rest approximately 1,000 feet beyond the departure end. No injuries were sustained by him or the captain.

Two witnesses, who are airport firemen, were located on the north side of the airport fire station. They stated they were observing a thunderstorm that was rapidly closing on their position from the southwest. They heard what sounded like a jet landing on runway 31. They looked toward the runway and observed a Lear 55 with reversers engaged attempting to stop. They realized the aircraft would not be able to stop with the remaining runway. They responded to the scene with the fire truck and at this time heavy rain, gusty winds, and lightning had closed in on the airport. The aircraft had crashed through a chain link fence, broken off the main landing gear, and come to rest in a sandy drainage ditch. The aircraft was leaking fuel. They foamed the aircraft and then opened the main cabin door where they were advised by the flight crew that they were not injured. They then opened the emergency exit and the flight crew exited from it.

The air traffic controllers in the FXE control tower at the time of the accident stated that N55LF, operating as Hop-a-Jet flight 55, was cleared to land on runway 31. They observed the airplane touch down on runway 31 near the "C" taxiway, run off the runway into the grass, cross over taxiway "F", and come to rest.

Transcripts of the cockpit voice recorder (CVR) showed that at 1112:04, the first officer

requested permission to taxi to the active runway at FLL. The ground controller cleared the flight to runway 27R. At 1127:30, the local controller reported to a Delta Airlines flight that was on a seven mile final approach to land on runway 27R that the winds were 250 degrees at 19 knots, gusting to 50 knots. The Delta Airlines flight crew then informed the controller they were making a missed approach. At 1130:05 the captain asks the first officer if "can you see the end of the weather? If we make a hard right turn, can we stay clear of it?" The first officer responded "I believe so." At 1130:06 the local controller reported "wind shear alert. The centerfield wind 230 at 22. Runway 27R departure 25 knot loss one mile departure." The captain stated to the first officer "sweet."

At 1132:11 the captain transmitted to the local controller "tower, any chance of Hop-a-Jet 55 getting out of here?" The local controller responded wind 230 at 17, right turn direct FXE approved, runway 27R cleared for takeoff. The captain responded "cleared to go, right turn out." At 1133:10 the captain asks for gear up. At 1133:15 the local controller responded to a Southwest Airlines Flight waiting for takeoff "no, don't look like anyone's gonna go." "The uh, weather is due west moving rapidly to the north. It looks like a few minutes, and you all be in the clear straight out." At 1133:17, the captain stated to the first officer "oh #. Think this was a bad idea." The first officer responded "no airport in sight." At 1133:43 the sound similar to precipitation hitting the windshield is recorded. At 1133:46 the FLL local controller instructs the flight crew to contact FXE Tower.

At 1133:54 the CVR records the FXE local controller transmitting "wind 200, variable 250 at 15, altimeter 29.99. Heavy cell of weather to the west moving eastbound. Low level wind shear possible. At 1134:16, the FXE local controller transmits "attention all aircraft, low level wind shear advisories are in effect. Use caution. Wind 240 at 10." At 1134:51, the first officer transmitted to the FXE local controller that the flight was over the shoreline inbound full stop. At 1135:02, the FXE local controller transmitted "Hop-a-Jet 55, Executive tower, wind 210 variable 250 at 35, 35 knots and gusting. Winds are uh, heavy on the field. Low level wind shear advisories are in effect. Heavy rains from the west, eastbound and would you like to proceed inbound and land Executive? Say intentions." The first officer responded "that's affirmative." The local controller responded, "Hop-a-Jet 55 straight in runway three one if able. The winds 230 gusts, correction, winds 230 variable 210 at 25." At 1135:48, the local controller transmitted, "Hop-a-Jet 55, wind 230 variable 300 at 25 gusts 35. Altimeter 30.00. Runways are wet. Traffic is exiting the runway prior to your arrival, a Dutchess. Caution standing water on runways. Low level wind shear advisories in effect, Runway 31. Cleared to land." The first officer responded "cleared to land, Hop-a-Jet 55."

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Recorded radar data from the FAA Miami Approach Control showed that the flight climbed to

2,200 feet msl after takeoff and turned to a northeasterly heading. Upon reaching the coastline, the flight turned north and paralleled the coast. At this point the flight contacted the FXE local controller and was informed "Hop-a-Jet 55, Executive tower, wind 210 variable 250 at 35, 35 knots and gusting. Winds are uh, heavy on the field. Low level wind shear advisories are in effect. Heavy rains from the west, eastbound and would you like to proceed inbound and land Executive? Say intentions." While on about a 2 mile final approach the local controller transmitted "Hop-a-Jet 55, wind 230 variable 300 at 25 gusts 35. Altimeter 30.00. Runways are wet. Traffic is exiting the runway prior to your arrival, a Dutchess. Caution standing water on runways. Low level wind shear advisories in effect, Runway 31. Cleared to land." At about a 1/2 mile final the flight is at 300-400 feet at 130 knots groundspeed.

Personnel Information

At the time of the accident, the captain held an FAA airline transport pilot certificate with an airplane multiengine land rating, a airplane single engine land rating at the commercial pilot level, and Learjet and Learjet 60 type ratings. The certificate was last issued on October 26, 2003. The pilot held a FAA first class medical certificated issued on April 26, 2004, with no limitations. The captain was hired by Hop-a-Jet, Inc. in June 1999, and was assigned as a FAR Part 135 first officer on the Learjet 25, 35, and 55 on July 15, 1999. On May 26, 2000, he was assigned as a FAR Part 135 captain on the Learjet 25, 35, and 55. On June 7, 2001, he was assigned as a Flight and Ground Instructor on the Learjet 35 and 55. The captain received a pilot-in-command check in accordance with FAR Part 135.293 and 297, for the Learjet 55, on June 12, 2004. The captain reported after the accident that he had 7,595 total flight hours, 1,994 total flight hours in the Learjet, and 1,294 total flight hours as captain in the Learjet.

At the time of the accident, the first officer held a FAA commercial pilot certificate with airplane single engine, airplane multiengine, rotorcraft, and instrument airplane ratings. The certificate was last issued on July 12, 2004, when the commercial pilot certificate with the multiengine land rating was added. The first officer held a FAA first class medical certificate issued on August 26, 2002, with no limitations. The first officer was employed by Hop-a-Jet, Inc. in a managerial position, and was not qualified as a pilot for FAR Part 135 operations. The first officer reported after the accident that he had 412 total flight hours and 10 flight hours in the Learjet.

Airplane Information

The airplane was a Learjet model 55, serial number 112, manufactured in 1984. At the time of the accident the airplane had accumulated 6,318 total flight hours. The airplane was last inspected on June 10, 2004, 42 flight hours before the accident, when it received an inspection in accordance with an approved aircraft inspection program (AAIP).

The airplane was equipped with Aeronca engine thrust reversers. The airplane was not equipped with a drag chute system.

Meteorological Information

Post accident review of meteorological information was performed by an NTSB Senior Meteorologist. The National Weather Service (NWS) 1119 Radar Summary Chart depicted a large area of echoes associated with thunderstorms and rain showers extending over Florida. Echoes in the vicinity of the accident range to intense to extreme intensity with movement to the northeast at 26 knots.

Review of satellite data shows the 1115, Goes-12 infrared image depicts a large area of low broken clouds over the region with multiple enhanced area identified with convective clouds forming to the east, south through southwest, and west of the Fort Lauderdale area. Towering Cumulus clouds are identified over and west of FLL merging into the enhanced area to the southwest.

The 1132, Goes-12 infrared image depicts a rapidly developing cumulonimbus cloud between and over the FLL and FXE airports. The top of the cloud over FXE was in the range of 22,000 feet. The top of the cloud southwest of FXE was in the 39,000 feet range.

The 1145, Goes-12 infrared image depicts a developing cumulonimbus cloud over FXE with the cloud top in the 42,000 feet range.

Data from the Miami Doppler Weather Radar System for the time of the accident was not available due to technical problems with the system. Data was obtained from the Melbourne, Florida Doppler Weather Radar System, located 118 miles north-northwest of the accident site. The data showed that at FXE, between 1130 and 1145, a VIP Level 1 to 2 echo evolved into a VIP Level 5 "intense" echo at 1135 and a VIP Level 6 "extreme" echo by 1145.

Recorded lightning data indicated that between 1137 and 1147, in the area of FXE, there were a total of 64 cloud-to-ground lightning strikes within 15 miles of the airport. In the 5 minutes before the accident there were 15 strikes, all south of the airport. Lightning activity peaked at 1137 with 12 strikes during the 1 minute period.

The flight crew reported they obtained weather information from a weather briefing service at Hop-a-Jet's FXE facility and at National Jets at FLL prior to the flight. The CVR shows that ATC also issued current weather information to the flight crew.

Communications

There were no reported problems with communications between the flight crew of N55LF and FAA Air Traffic Controllers.

Airport Information

Fort Lauderdale Executive Airport is located approximately 5 miles north of the City of Fort Lauderdale, at an elevation of 14 feet msl. The airport is owned and operated by the City of Fort Lauderdale.

Fort Lauderdale Executive Airport has two asphalt runways, 08/26 and 13/31. Runway 08/26 is 6,000 feet long and 100 feet wide. Runway 13/31 is 4,000 feet long and 100 feet wide, and is not grooved. At the time of the accident runway 08/26 was closed for repairs. From the approach end of runway 31 to taxiway "C" the distance is 1,100 feet.

Flight Recorders

The airplane was equipped with a Universal CVR-30, thirty minute, digital CVR, serial number 6502. The CVR was taken to the NTSB Vehicle Recorders Division, Washington, D.C., where the Cockpit Voice Recorder Group convened on August 11, 2004. A transcript was prepared of the entire 30:04 minute recording.

Wreckage and Impact Information

The airplane traveled past the departure end of runway 31, passing a section of grass and gravel area before crossing taxiway F. Indications of the nose and main gear shearing off from the

fuselage at that point were evident due to the step up to the taxiway from the grass area. The fuselage slid the remaining way on its belly and knocked down a chain link fence protecting a wild life preserve area for ground owls and turtles. The fuselage came to stop in a nose-high attitude on a sand embankment on the northwest side of a ditch, about 1,000 feet past the departure end of runway 31.

Examination of the airplane at the accident site after the accident was performed by an FAA inspector. The engine thrust levers were in idle. The engine thrust reverser doors were found in the fully deployed position. The engine fire handles were activated. The fuel quantity gauge read 1,200 pounds and the fuel used counter read 291 pounds. The left altimeter was set to 30.00 inches hg. The first officer's altimeter was set to 29.92 inches hg. The wing flaps were in the 8-degree extended position.

Medical and Pathological Information

The captain and first officer reported no injuries. No post accident drug testing was performed on the pilots.

Tests and Research

The airplane flight manual states that the thrust reverser system is activated by the circuit breakers for the thrust reverser lights and thrust reverser emergency stow in. The aircraft must be on the ground and the squat switches in the ground mode. The normal-emergency stow switch must be in the normal position. Both engine thrust levers must be at idle. When these conditions are met the thrust reverse levers can be pulled to the reverse idle/deploy position. An unlock light will illuminate for each reverser followed by a deploy light when the thrust reverser is fully deployed. When both thrust reversers are fully deployed the throttle lock will release and reverse thrust may be increased.

To perform a normal stow of the thrust reversers, the thrust reverser levers are returned to the reverse idle/deploy position and then pushed to the stow position. The unlock lights will illuminate and when each thrust reverser is fully stowed the unlock light will go out. The captain stated after the accident that he learned from maintenance personnel that it takes several seconds for the thrust reversers to stow when the levers are moved to the stow position.

A thrust reverser warning horn will sound whenever a thrust reverser deploy or unlock light is illuminated and the corresponding main thrust lever is not in the idle position. This horn was heard on the CVR beginning during the landing roll and continuing until the CVR recording ended.

The airplane flight manual also states that the main thrust levers cannot be moved to the fuel cutoff position until thrust reverser levers are returned to the stow position. The captain stated after the accident that the thrust levers would not shutdown the engines after the accident. He used the engine fire handles. The FAA inspector who examined the airplane after the accident found the engine thrust reverser levers out of the stowed position.

A limitation contained in the airplane flight manual for the thrust reversers is "thrust reversers must not be used for touch-and-go landings."

Airplane performance information supplied by Learjet, Inc. showed that at the accident airplanes weight at the time of the accident, the Vref speed of 126 KIAS, and the weather conditions, the scheduled landing distance for a dry runway was about 2,900 feet. By applying the penalty for a wet runway with .1 inch of water depth, the distance increases to 4,640 feet.

For water depths over .1 inch the landing distance penalty is unknown.

On July 22, 2004, continuous friction measurement was performed on runway 13/31 by the State of Florida, State Materials Office, Gainesville, Florida. Runway friction values were in the low to mid 90 range (mu) as measured at 40 mph. These values are above the minimum requirements established by the FAA for runway friction.

Additional Information

The airplane was released by NTSB to Barry Ellis, President, Hop-a-Jet, Inc., on July 20, 2004. The CVR was returned to Barry Ellis on March 29, 2005.

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	33, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last Medical Exam:	04/26/2004
Occupational Pilot:		Last Flight Review or Equivalent:	06/12/2004
Flight Time:	7595 hours (Total, all aircraft), 1994 hours (Total, this make and model), 6000 hours (Pilot In Command, all aircraft), 141 hours (Last 90 days, all aircraft), 54 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Commercial	Age:	30, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last Medical Exam:	08/26/2002
Occupational Pilot:		Last Flight Review or Equivalent:	07/12/2004
Flight Time:	412 hours (Total, all aircraft), 10 hours (Total, this make and model), 318 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Learjet	Registration:	N55LF
Model/Series:	55	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	112
Landing Gear Type:	Retractable - Tricycle	Seats:	9
Date/Type of Last Inspection:	06/10/2004, AAIP	Certified Max Gross Wt.:	21500 lbs
Time Since Last Inspection:	42 Hours	Engines:	2 Turbo Fan
Airframe Total Time:	6318 Hours	Engine Manufacturer:	Garrett
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TFE-731-3
Registered Owner:	55-112 LLC	Rated Power:	3700 lbs
Operator:	Hop a Jet, Inc.	Air Carrier Operating Certificate:	On-demand Air Taxi (135)
Operator Does Business As:	Hop a Jet	Operator Designator Code:	EXOA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KFXE, 14 ft msl	Observation Time:	1139 EDT
Distance from Accident Site:	1 Nautical Miles	Direction from Accident Site:	130°
Lowest Cloud Condition:	Scattered / 3600 ft agl	Temperature/Dew Point:	28° C / 25° C
Lowest Ceiling:		Visibility	1.5 Miles
Wind Speed/Gusts, Direction:	25 knots/ 30 knots, 220°	Visibility (RVR):	
Altimeter Setting:	30 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Fort Lauderdale, FL (KFL)	Type of Flight Plan Filed:	None
Destination:	Ft. Lauderdale, FL (KFXE)	Type of Clearance:	VFR
Departure Time:	1133 EDT	Type of Airspace:	Class D

Airport Information

Airport:	Fort Lauderdale Executive (KFXE)	Runway Surface Type:	Asphalt
Airport Elevation:	14 ft	Runway Surface Condition:	Wet
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	4000 ft / 100 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	26.198889, -80.173889

Administrative Information

Investigator In Charge (IIC):	Jeffrey L Kennedy	Adopted Date:	07/07/2005
Additional Participating Persons:	James R Piccoli; FAA FSDO; Fort Lauderdale, FL David Donovan; Hop-a-Jet, Inc.; Fort Lauderdale, FL Ed Grabman; Bombardier Aerospace-Learjet, Inc.; Wichita, KS		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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