



# National Transportation Safety Board Aviation Accident Final Report

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|--------------------------------|---|-------------------------|-----------------|
| <b>Location:</b>               | GREENVILLE, SC                          | <b>Accident Number:</b> | MIA97LA088      |
| <b>Date &amp; Time:</b>        | 02/27/1997, 1015 EST                    | <b>Registration:</b>    | N440HM          |
| <b>Aircraft:</b>               | Learjet LR35                            | <b>Aircraft Damage:</b> | Destroyed       |
| <b>Defining Event:</b>         |   | <b>Injuries:</b>        | 1 Minor, 1 None |
| <b>Flight Conducted Under:</b> | Part 91: General Aviation - Positioning |                         |                 |

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## Analysis

The pilot-in-command stated he was cleared for an ILS approach. He had to use spoilers to intercept the glideslope. The landing was extended at the outer marker as the airspeed was slowed through 200 knots. As the airspeed decreased the spoilers were retracted and the flaps were extended to 20-degrees. The airplane was drifting to the right and flaps were lowered to 40-degrees as the drift was corrected. The airplane floated and touched down long. The spoilers, and brakes were applied as well as full reverse. There was no braking due to hydroplaning. Examination of the crash site revealed the airplane went off the end of the runway, skidded through 200 feet of sod, vaulted off a 25 foot embankment, skidded across a road, and collided with a ditch.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's failure to achieve the proper touchdown point on a known wet runway, resulting in a subsequent overrun and on ground collision with a ditch.

## Findings

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Occurrence #1: OVERRUN

Phase of Operation: LANDING

Findings

1. AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - WET
2. (C) TOUCHDOWN - IMPROPER - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

3. TERRAIN CONDITION - DITCH

## Factual Information

On February 27, 1997, about 1015 eastern standard time, a Lear 35, N440HM, Grasshopper 440, registered to Apple Jet Inc., operated by Colvin Aviation Inc., as a 14 CFR Part 91 positioning flight, went off the end of the runway on landing rollout at the Greenville Downtown Airport, Greenville, South Carolina. Instrument meteorological conditions prevailed and an IFR flight plan was filed. The airplane was destroyed. The airline transport pilot-in-command (PIC) sustained minor injuries, and the airline transport rated second-in-command (SIC/Chief Pilot) was not injured. The flight originated from Atlanta, Georgia, about 35 minutes before the accident.

The SIC stated the PIC was cleared for an ILS approach to runway 36. The PIC was cleared to descend from 7,000 feet to 2,500 feet and had to use the spoilers to descend. The spoilers were retracted just before reaching the outer marker, and the airspeed was about 180. The flaps were extended to 20-degrees and the landing gear was lowered. Full flaps were extended and the airplane was off the centerline to the right over the fixed distance markers on final approach. The PIC took the required corrective action before touchdown. The VREF speed was 130+10 knots. The airplane floated and touched down long. The PIC moved the throttles to the idle position, deployed the spoilers and the reversers. He was looking inside the airplane at the reverser percentage, looked up and saw the 1,000-foot fixed distance markers at the end of the runway approaching. He informed the PIC 1,000 feet. The PIC made no comment, applied brakes and more reverse. The airplane skidded, and went off the end of the runway downhill. The PIC inadvertently moved the throttles forward, the airplane crossed over a road and collided with a ditch. He moved the throttles to the idle position and pulled the fire handles. The PIC turned off the inverters and the battery. Both crewmembers exited the airplane unassisted. The PIC confirmed the SIC comments in a subsequent interview with the NTSB and FAA.

The PIC stated to the FAA that he did not achieve a stabilized approach. He saw the runway about 200 feet above decision height. He thought his landing the day before was not smooth and he was trying to make a better landing. He felt the airplane did not want to slow down even though he deployed the spoilers and thrust reversers, and they went off the end of the runway.

Examination of the crash site revealed the airplane went off the end of the runway, skidded through 200 feet of sod, vaulted off a 25 foot elevated area, skidded across a road, and collided with a ditch. The wreckage was released to Mr. Dennis Wenzlick, Chief Pilot, Colvin Aviation Inc., on February 27, 1997. The cockpit voice recorder was released to Mr. Edward E. Fuentes, Colvin Aviation Inc., on March 25, 1997.

## Pilot Information

|                                  |   |                               |                            |
|----------------------------------|---|-------------------------------|----------------------------|
| <b>Certificate:</b>              | Airline Transport; Flight Instructor; Commercial  | <b>Age:</b>                   | 33, Male                   |
| <b>Airplane Rating(s):</b>       | Multi-engine Land; Single-engine Land   | <b>Seat Occupied:</b>         | Left                       |
| <b>Other Aircraft Rating(s):</b> | None  | <b>Restraint Used:</b>        | Seatbelt, Shoulder harness |
| <b>Instrument Rating(s):</b>     | Airplane  | <b>Second Pilot Present:</b>  | Yes                        |
| <b>Instructor Rating(s):</b>     | Airplane Multi-engine; Airplane Single-engine; Instrument Airplane  | <b>Toxicology Performed:</b>  | No                         |
| <b>Medical Certification:</b>    | Class 1 Valid Medical--no waivers/lim.  | <b>Last FAA Medical Exam:</b> | 10/30/1996                 |
| <b>Occupational Pilot:</b>       | <b>Last Flight Review or Equivalent:</b>  |                               |                            |
| <b>Flight Time:</b>              | 5293 hours (Total, all aircraft), 202 hours (Total, this make and model), 4366 hours (Pilot In Command, all aircraft), 208 hours (Last 90 days, all aircraft), 48 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft) |                               |                            |

## Aircraft and Owner/Operator Information

|                                      |                          |                                       |                          |
|--------------------------------------|--------------------------|---------------------------------------|--------------------------|
| <b>Aircraft Make:</b>                | Learjet                  | <b>Registration:</b>                  | N440HM                   |
| <b>Model/Series:</b>                 | LR35 LR35                | <b>Aircraft Category:</b>             | Airplane                 |
| <b>Year of Manufacture:</b>          |                          | <b>Amateur Built:</b>                 | No                       |
| <b>Airworthiness Certificate:</b>    | Transport                | <b>Serial Number:</b>                 | 35A294                   |
| <b>Landing Gear Type:</b>            | Retractable - Tricycle   | <b>Seats:</b>                         | 10                       |
| <b>Date/Type of Last Inspection:</b> | Continuous Airworthiness | <b>Certified Max Gross Wt.:</b>       | 18300 lbs                |
| <b>Time Since Last Inspection:</b>   |                          | <b>Engines:</b>                       | 2 Turbo Fan              |
| <b>Airframe Total Time:</b>          |                          | <b>Engine Manufacturer:</b>           | Garrett                  |
| <b>ELT:</b>                          |                          | <b>Engine Model/Series:</b>           | TFE-731-2-2B             |
| <b>Registered Owner:</b>             | COLVIN AVIATION INC.     | <b>Rated Power:</b>                   | 3500 lbs                 |
| <b>Operator:</b>                     | COLVIN AVIATION INC.     | <b>Operating Certificate(s) Held:</b> | On-demand Air Taxi (135) |
| <b>Operator Does Business As:</b>    |                          | <b>Operator Designator Code:</b>      | ESYA                     |

## Meteorological Information and Flight Plan

|                                  |                      |   |                  |
|----------------------------------|----------------------|---|------------------|
| Conditions at Accident Site:     | Visual Conditions    | Condition of Light:                     | Day              |
| Observation Facility, Elevation: | GMU, 1048 ft msl     | Distance from Accident Site:            | 0 Nautical Miles |
| Observation Time:                | 1012 EST             | Direction from Accident Site:           | 0°               |
| Lowest Cloud Condition:          | Unknown / 0 ft agl   | Visibility                              | 0.5 Miles        |
| Lowest Ceiling:                  | Broken / 2400 ft agl | Visibility (RVR):                       | 0 ft             |
| Wind Speed/Gusts:                | 2 knots /            | Turbulence Type<br>Forecast/Actual:     | /                |
| Wind Direction:                  |                      | Turbulence Severity<br>Forecast/Actual: | /                |
| Altimeter Setting:               | 30 inches Hg         | Temperature/Dew Point:                  | 11 °C / 12 °C    |
| Precipitation and Obscuration:   |                      |   |                  |
| Departure Point:                 | ATLANTA, GA (ATL)    | Type of Flight Plan Filed:              | IFR              |
| Destination:                     | (GMU)                | Type of Clearance:                      | IFR              |
| Departure Time:                  | 0940 EST             | Type of Airspace:                       | Class D          |

## Airport Information

|                      |                           |                           |         |
|----------------------|---------------------------|---------------------------|---------|
| Airport:             | GREENVILLE DOWNTOWN (GMU) | Runway Surface Type:      | Asphalt |
| Airport Elevation:   | 1048 ft                   | Runway Surface Condition: | Wet     |
| Runway Used:         | 36                        | IFR Approach:             | ILS     |
| Runway Length/Width: | 5393 ft / 150 ft          | VFR Approach/Landing:     | None    |

## Wreckage and Impact Information

|                     |                 |                      |           |
|---------------------|-----------------|----------------------|-----------|
| Crew Injuries:      | 1 Minor, 1 None | Aircraft Damage:     | Destroyed |
| Passenger Injuries: | N/A             | Aircraft Fire:       | None      |
| Ground Injuries:    | N/A             | Aircraft Explosion:  | None      |
| Total Injuries:     | 1 Minor, 1 None | Latitude, Longitude: |           |

## Administrative Information

|                                   |  |              |            |
|-----------------------------------|--|--------------|------------|
| Investigator In Charge (IIC):     | CARROL A SMITH   | Report Date: | 02/28/2000 |
| Additional Participating Persons: | JAMES M MALEK; WEST COLUMBIA, SC   |              |            |
| 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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> . |              |            |

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.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).