



National Transportation Safety Board Aviation Accident Final Report

| | | | |
|--------------------------------|--------------------------------------|-------------------------|------------|
| Location: | PECOS, NM | Accident Number: | FTW93FA255 |
| Date & Time: | 09/05/1993, 1715 MDT | Registration: | N999BH |
| Aircraft: | GATES LEARJET 25D | Aircraft Damage: | Destroyed |
| Defining Event: | | Injuries: | 7 Fatal |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Analysis

WHILE DESCENDING TO HIS DESTINATION THE PILOT IN COMMAND (PIC) CANCELED HIS IFR CLEARANCE AND DECLINED VFR FLIGHT FOLLOWING. WITNESSES OBSERVED THE AIRCRAFT MANEUVERING AT LOW ALTITUDE IN THE AREA WHERE THE ACCIDENT OCCURRED, APPROXIMATELY 25 MILES FROM THE DESTINATION AIRPORT. THE AIRCRAFT IMPACTED RISING TERRAIN AT 7,300 FEET MSL. TOXICOLOGICAL TESTING REVEALED THAT THE PIC AND TWO PASSENGERS HAD COCAINE AND ALCOHOL IN TISSUE SAMPLES. AT AN UNKNOWN TIME THE PIC LEFT THE COCKPIT. BASED ON COCKPIT VOICE RECORDER ANALYSIS, HE WAS CALLED BACK TO THE COCKPIT APPROXIMATELY 11 MINUTES PRIOR TO THE ACCIDENT BY THE COPILOT. THE COPILOT HAD NO PREVIOUS LEAR EXPERIENCE. TOXICOLOGICAL TEST RESULTS INDICATED THAT THE PIC 'USED COCAINE IN THE VERY RECENT PAST, PROBABLY WHILE IN-FLIGHT' AND CONCLUDED THAT HE 'WAS IMPAIRED BY MULTIPLE DRUG USE OF COCAINE AND ALCOHOL.' THE INVESTIGATION DID NOT REVEAL ANY STRUCTURAL OR SYSTEM FAILURE OR MALFUNCTION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: WAS PHYSICAL IMPAIRMENT OF THE PILOT IN COMMAND FROM ALCOHOL AND DRUGS. A FACTOR WAS THE FIRST OFFICER'S LACK OF EXPERIENCE IN THE LEAR JET.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: MANEUVERING

Findings

1. (C) JUDGMENT - POOR - PILOT IN COMMAND
2. (C) IMPAIRMENT(DRUGS) - PILOT IN COMMAND
3. (C) IMPAIRMENT(ALCOHOL) - PILOT IN COMMAND
4. MANEUVER - INITIATED - PILOT IN COMMAND
5. TERRAIN CONDITION - RISING
6. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
7. OSTENTATIOUS DISPLAY - PILOT IN COMMAND
8. (F) REMEDIAL ACTION - NOT ATTAINED - COPILOT/SECOND PILOT
9. LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - COPILOT/SECOND PILOT

Factual Information

HISTORY OF FLIGHT

On September 5, 1993, at 1715 mountain daylight time, a Lear 25D, N999BH, impacted terrain approximately 7 miles south of Pecos, New Mexico. Both pilots and the five passengers sustained fatal injuries and the aircraft was destroyed. Visual meteorological conditions prevailed for this personal flight and an instrument flight rules (IFR) flight plan was cancelled shortly before the accident.

The flight departed William P. Hobby Airport, (HOU) Houston, Texas, at 1527 mountain daylight time and was cleared "direct Lubbock, direct Anton Chico, direct Santa Fe." The en route altitude was 39,000 feet above mean sea level (msl). At 1707, while in a descent out of 13,000 feet msl, the pilot canceled his IFR flight plan, refused the offered VFR flight following, and reported the Santa Fe airport in sight. The controller accepted the cancellation and informed the pilot to contact Santa Fe Tower, providing a frequency for that contact. At 1710, the pilot made a radio transmission to what was supposed to be Santa Fe Tower and stated he was 25 miles out for landing. He was actually talking to the same low altitude controller he had canceled his IFR flight plan with. The controller again informed the pilot to contact Santa Fe Tower and provided the frequency. No further communications were recorded.

On September 7, 1993, after persons in the Houston area reported the aircraft overdue, a search was initiated. The aircraft was located during an aerial search by the New Mexico State Police approximately 25 miles east southeast of Santa Fe on a hillside at an elevation of 7,300 feet msl.

There were several witnesses to the maneuvers performed by the aircraft in the vicinity of the accident location prior to impact. Two witnesses, who chose not to provide names or written statements, were located in the town of Rowe, New Mexico. Between 1700 and 1730 they observed an aircraft descend into the Pecos Valley to an altitude below the rim of the valley from east to west, pulling up over the south rim of the valley. They were able to describe the aircraft in sufficient detail to convince the investigator-in-charge that the aircraft they observed was a Lear.

Another witness, who also chose not to be identified, was located in the town of Lamy, New Mexico, near the site of a movie set where filming was in progress. Lamy is approximately 7 miles northwest of the accident site. This witness described a Lear performing a steep turn at high speed and low altitude (estimated at less than 1,000 feet above the ground) over the movie set, which was located approximately one mile south of town. This information was confirmed by persons at the movie set. The time was between 1700 and 1730.

A third witness, whose written statement is attached, did not see the aircraft but heard what he described as a jet pass near his home. He described sounds which he later associated with impact.

For further details of the en route portion of the flight see the attached Air Traffic Control Factual Report, Recorded Radar Study, and Cockpit Voice Recorder Factual Report.

PERSONNEL INFORMATION

An aviation resume found in the pilot's personal effects is attached and provides some background information on the pilot.

According to representatives of the aircraft operator, the pilot and aircraft came to them as a package deal, with the pilot being the purchaser of the aircraft. This flight was a personal flight and not a scheduled charter with Black Swan.

Also attached is a copy of the pilot's training records provided by the operator. These documents include a copy of the pilot's last CFR Part 135.297 competency/proficiency check given on July 21, 1993. The check airman who gave the check was the chief pilot for Black Swan.

For further details of the pilot's experience and ratings, refer to the pilot section of this document.

The first officer was the owner/operator of Rich Aviation, Inc., Houston Hobby Airport.

According to information provided by the FAA, the first officer held an airline transport pilot certificate, airplane single and multiengine land, and a commercial pilot certificate, airplane single engine sea. The date of issue for his certificate was July 7, 1991. He held a type rating in the CE 500.

A review of a certified copy of the first officer's pilot log book indicated that he had no previous flight experience in the Lear.

For further details on the first officer's flight experience see NTSB Form Supplement 'E,' which is part of this factual record.

COMMUNICATIONS

At 1703, at the first officer's request, the pilot returned to the cockpit from the cabin where, according to the information on the voice recorder, he had been for some period of time. At 1710:12, the voice of the pilot stated "I got to show 'em something pretty.. ya'll want to see something pretty watch this." at 1710:50, the pilot states "hey guys wanna (little) treat look outside." This is followed by a women's excited scream at 1711:05.

For details of pertinent communications, see the Cockpit Voice Recorder Factual Report and Air Traffic Control Factual Report.

FLIGHT RECORDERS

The aircraft was equipped with a cockpit voice recorder. This recorder incorporated a disabling 'g' switch. This switch disables the recorder when 'g' forces exceed approximately 4 'g's. According to the attached Cockpit Voice Recorder Factual Report, the recorder shut down due to probable high 'g' forces at some time prior to impact. A transcript of the recorded information is part of the attached recorder factual report.

WRECKAGE AND IMPACT INFORMATION

The initial ground scar was at the base of a 20 degree slope. Base course of the ground scar and wreckage disbursement was 285 degrees. Wreckage was scattered for a distance of approximately 1,500 feet from the initial impact point. For details of the wreckage scatter and condition see the attached reports prepared by Lear, General Electric, and the attached GPS study conducted by the University of New Mexico at the Safety Board's request.

A sealed plastic bag was found in the wreckage. This bag contained a green plant material. The bag was placed in the custody of New Mexico State Police Officer Orlando Cordova and a request was initiated for the New Mexico State Crime Laboratory to analyze the contents of the

bag. According to their analysis the bag contained 2.7 grams of marijuana. The laboratory report is attached.

Measurement of the stabilizer trim was conducted during wreckage examination. The trim was calculated to be -2.6 degrees stabilizer angle. Using a calculated gross weight of 12,254 pounds and a calculated center of gravity of 26.8% mean aerodynamic chord, the calculated indicated airspeed for level trimmed flight at impact was 187 to 217 knots.

Examination of an airspeed indicator found in the wreckage provided witness marks on the face of the instrument corresponding to approximately 133 knots.

No evidence was found to indicate any structural, and/or system failure or malfunction.

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies were performed on all seven occupants by the Office of the Medical examiner, State of New Mexico.

Toxicological evaluation was conducted on samples from all occupants. Three of the occupants were evaluated as positive for ethanol and/or cocaine. The laboratory reports are attached.

One of the persons who tested positive for ethanol and cocaine was the pilot. A toxicology report was prepared by the Safety Board toxicologist and is attached. According to that report impairment of performance would be expected; however, the behavioral effects could not be established. Regarding the pilot's toxicology the report states in part "The finding of cocaine in the tissue of the PIC is significant because of its 'normal' short half-life. The word 'normal' is added here because this half-life may be lengthened by the use of alcohol, although this hypothesis has not been proven at this time. The finding of cocaine suggests that the PIC used cocaine in the very recent past, probably while in-flight."

ADDITIONAL DATA/INFORMATION

The wreckage was released to Mr. Jerry Pratt, President, Black Swan Jet Charter, on September 10, 1993. Parts retained are listed on the attached NTSB Wreckage Release Form. The parts were returned following examination.

Pilot Information

| | | | |
|----------------------------------|--|-------------------------------|------------|
| Certificate: | Airline Transport; Commercial | Age: | 45, Male |
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | Yes |
| Instructor Rating(s): | None | Toxicology Performed: | Yes |
| Medical Certification: | Class 1 Valid Medical--no waivers/lim. | Last FAA Medical Exam: | 08/10/1993 |
| Occupational Pilot: | Last Flight Review or Equivalent: | | |
| Flight Time: | 17000 hours (Total, all aircraft), 4000 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

| | | | |
|-------------------------------|--------------------------------------|--------------------------------|--------------------------|
| Aircraft Make: | GATES LEARJET | Registration: | N999BH |
| Model/Series: | 25D 25D | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | 318 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 10 |
| Date/Type of Last Inspection: | 08/10/1993, Continuous Airworthiness | Certified Max Gross Wt.: | 15000 lbs |
| Time Since Last Inspection: | | Engines: | 2 Turbo Jet |
| Airframe Total Time: | 4973 Hours | Engine Manufacturer: | GE |
| ELT: | Installed, not activated | Engine Model/Series: | CJ610-8A |
| Registered Owner: | CAMBRIDGE AVIATION, INC. | Rated Power: | 3100 lbs |
| Operator: | BLACK SWAN JET CHARTER | Operating Certificate(s) Held: | On-demand Air Taxi (135) |

Meteorological Information and Flight Plan

| | | | |
|----------------------------------|-------------------------|--------------------------------------|-------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | SAF, 6344 ft msl | Distance from Accident Site: | 25 Nautical Miles |
| Observation Time: | 1647 MDT | Direction from Accident Site: | 300° |
| Lowest Cloud Condition: | Scattered / 6000 ft agl | Visibility | 40 Miles |
| Lowest Ceiling: | Broken / 15000 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | 8 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 240° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30 inches Hg | Temperature/Dew Point: | 30° C / 3° C |
| Precipitation and Obscuration: | | | |
| Departure Point: | HOUSTON, TX (HOU) | Type of Flight Plan Filed: | IFR |
| Destination: | SANTA FE, NM (SAF) | Type of Clearance: | VFR |
| Departure Time: | 1527 MDT | Type of Airspace: | Class E |

Wreckage and Impact Information

| | | | |
|---------------------|---------|----------------------|-----------|
| Crew Injuries: | 2 Fatal | Aircraft Damage: | Destroyed |
| Passenger Injuries: | 5 Fatal | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 7 Fatal | Latitude, Longitude: | |

Administrative Information

| | | | |
|-----------------------------------|--|--------------|------------|
| Investigator In Charge (IIC): | NORMAN F WIEMEYER, | Report Date: | 09/14/1994 |
| Additional Participating Persons: | MARTIN SPEISER; WASHINGTON, DC | | |
| 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.

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](#).