



National Transportation Safety Board Aviation Accident Final Report

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|--------------------------------|---|-------------------------|--------------------|
| Location: | JOPLIN, MO | Accident Number: | MKC88FA027 |
| Date & Time: | 12/14/1987, 1358 CST | Registration: | N331PX |
| Aircraft: | BRITISH AEROSPACE BAE-3101 | Aircraft Damage: | Destroyed |
| Defining Event: | | Injuries: | 2 Serious, 5 Minor |
| Flight Conducted Under: | Part 135: Air Taxi & Commuter - Scheduled | | |

Analysis

THE CAPT STATED THAT HE HAD PLANNED THE APPROACH AT A HIGHER-THAN-NORMAL AIRSPEED AND ALTITUDE DUE TO A REPORTED LOW LEVEL WINDSHEAR. AT 400 FEET AGL THE ACFT ENTERED A LIGHT DOWNDRAFT BUT THE CREW CORRECTED THE DESCENT PROFILE WITH POWER. AT 200 FEET AGL THE ACFT SUDDENLY, ACCORDING TO THE CAPT, PITCHED DOWN BEFORE IMPACTING THE RUNWAY. WITNESSES STATED THAT THE ACFT PITCHED DOWN ON SHORT FINAL, LEVELED OFF, THEN SLAMMED ONTO THE RUNWAY ON ALL WHEELS. IT THEN BOUNCED, PITCHED DOWN AGAIN AND IMPACTED THE RUNWAY NOSE-FIRST. A SUBSEQUENT INSPECTION, OPERATIONAL TEST, AND TEARDOWN OF THE AIRPLANE'S STALL PROTECTION SYSTEM FOUND IT TO BE FUNCTIONING SATISFACTORILY. THE TWO POWERPLANTS ALSO TESTED WITHIN NORMAL PARAMETERS.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

1. (C) PLANNED APPROACH - IMPROPER - PILOT IN COMMAND
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

Occurrence #2: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

3. (C) FLARE - IMPROPER - PILOT IN COMMAND
4. WEATHER CONDITION - WINDSHEAR
5. ABORTED LANDING - NOT PERFORMED - PILOT IN COMMAND
6. (F) RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND

Occurrence #3: COMPLETE GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

Findings

7. (F) TERRAIN CONDITION - BERM

Factual Information

Pilot Information

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|----------------------------------|---|--|----------------------------|
| Certificate: | Airline Transport | Age: | 35, 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): | None | Toxicology Performed: | Yes |
| Medical Certification: | Class 1 Valid Medical--no waivers/lim. | Last FAA Medical Exam: | 11/05/1987 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | |
| Flight Time: | 4864 hours (Total, all aircraft), 414 hours (Total, this make and model), 1400 hours (Pilot In Command, all aircraft), 253 hours (Last 90 days, all aircraft), 82 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|---------------------------------|---------------------------------------|----------------------------|
| Aircraft Make: | BRITISH AEROSPACE | Registration: | N331PX |
| Model/Series: | BAE-3101 BAE-3101 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Transport | Serial Number: | 700 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 19 |
| Date/Type of Last Inspection: | 11/10/1987, AAIP | Certified Max Gross Wt.: | 15000 lbs |
| Time Since Last Inspection: | 246 Hours | Engines: | 2 Turbo Prop |
| Airframe Total Time: | 3470 Hours | Engine Manufacturer: | GARRETT |
| ELT: | Installed, not activated | Engine Model/Series: | TPE-331-10 |
| Registered Owner: | MERIDIAN TRUST CO. (TRUSTEE) | Rated Power: | 900 hp |
| Operator: | EXPRESS AIRLINES, INC. | Operating Certificate(s) Held: | Commuter Air Carrier (135) |
| Operator Does Business As: | REPUBLIC EXP/NORTHWEST AIRLINK | Operator Designator Code: | REXA |

Meteorological Information and Flight Plan

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|----------------------------------|--------------------------------|--------------------------------------|------------------|
| Conditions at Accident Site: | Instrument Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | JLN, 981 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 1348 CST | Direction from Accident Site: | 0° |
| Lowest Cloud Condition: | Partial Obscuration / 0 ft agl | Visibility | 8 Miles |
| Lowest Ceiling: | Overcast / 1200 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | 12 knots / 17 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 70° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 0°C / -1°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | MEMPHIS, TN (MEM) | Type of Flight Plan Filed: | IFR |
| Destination: | | Type of Clearance: | IFR |
| Departure Time: | 1234 CST | Type of Airspace: | Class D |

Airport Information

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|----------------------|------------------------|---------------------------|------------------------|
| Airport: | JOPLIN MUNICIPAL (JLN) | Runway Surface Type: | Asphalt |
| Airport Elevation: | 981 ft | Runway Surface Condition: | Rough; Snow--compacted |
| Runway Used: | 13 | IFR Approach: | ILS |
| Runway Length/Width: | 6503 ft / 150 ft | VFR Approach/Landing: | None |

Wreckage and Impact Information

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|---------------------|--------------------|----------------------|-----------|
| Crew Injuries: | 1 Serious | Aircraft Damage: | Destroyed |
| Passenger Injuries: | 1 Serious, 5 Minor | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 Serious, 5 Minor | Latitude, Longitude: | |

Administrative Information

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|-----------------------------------|--|--------------|------------|
| Investigator In Charge (IIC): | RAMON E VARGAS | Report Date: | 05/26/1989 |
| Additional Participating Persons: | | | |
| 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/ . | | |

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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](#).