



National Transportation Safety Board Aviation Accident Final Report

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|--------------------------------|-----------------------------|-------------------------|-------------|
| Location: | SAN ANTONIO, TX | Accident Number: | FTW92LA228 |
| Date & Time: | 09/18/1992, 1310 CDT | Registration: | N2183A |
| Aircraft: | FAIRCHILD SA-227-AC | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General Aviation - | | |

Analysis

THE PILOT WAS CONDUCTING A FUNCTIONAL TEST FLIGHT AND QUALITATIVE ENGINEERING EVALUATION OF THE AIRPLANE'S LONGITUDINAL CONTROL DURING LANDING. DURING FINAL APPROACH TO RUNWAY 12L, HE REDUCED THE ENGINES TO THE FLIGHT IDLE POSITIONS AND ESTABLISHED 95 KIAS. HE WAS UNABLE TO RAISE THE NOSE OF THE AIRPLANE DURING THE FLARE TO ARREST THE DESCENT RATE AND LANDED HARD ONTO THE RUNWAY. THE AIRPLANE WAS TAXIED TO THE RAMP AND SECURED. NO MECHANICAL FAILURE WAS FOUND OR REPORTED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE LANDING CAPABILITY OF THE AIRPLANE WAS EXCEEDED. THE LACK OF PERFORMANCE DATA WAS A FACTOR IN THE ACCIDENT.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. PROPER DESCENT RATE - EXCEEDED
2. (C) AIRCRAFT PERFORMANCE, LANDING CAPABILITY - EXCEEDED
3. (F) PERFORMANCE DATA - INADEQUATE - MANUFACTURER

Factual Information

Pilot Information

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| Certificate: | Airline Transport; Commercial | Age: | 47, 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: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | None Valid Medical--no waivers/lim. | Last Medical Exam: | 08/25/1992 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | |
| Flight Time: | 6000 hours (Total, all aircraft), 650 hours (Total, this make and model), 4000 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--------------------------------------|---|--------------|
| Aircraft Manufacturer: | FAIRCHILD | Registration: | N2183A |
| Model/Series: | SA-227-AC SA-227-AC | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | AC422B |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 19 |
| Date/Type of Last Inspection: | 08/18/1992, Continuous Airworthiness | Certified Max Gross Wt.: | 16000 lbs |
| Time Since Last Inspection: | 5 Hours | Engines: | 2 Turbo Prop |
| Airframe Total Time: | 17936 Hours | Engine Manufacturer: | GARRETT |
| ELT: | Installed, not activated | Engine Model/Series: | TPE331-11U |
| Registered Owner: | FAIRCHILD AIRCRAFT INC. | Rated Power: | 1000 hp |
| Operator: | FAIRCHILD AIRCRAFT INC. | Air Carrier Operating Certificate: | None |
| Operator Does Business As: | | Operator Designator Code: | MEJR |

Meteorological Information and Flight Plan

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|----------------------------------|-------------------------|-------------------------------|------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | , 0 ft msl | Observation Time: | 0000 |
| Distance from Accident Site: | 0 Nautical Miles | Direction from Accident Site: | 0° |
| Lowest Cloud Condition: | Scattered / 2500 ft agl | Temperature/Dew Point: | 30° C / 22° C |
| Lowest Ceiling: | None / 0 ft agl | Visibility | 6 Miles |
| Wind Speed/Gusts, Direction: | 6 knots, 190° | Visibility (RVR): | 0 ft |
| Altimeter Setting: | 29 inches Hg | Visibility (RVV): | 0 Miles |
| Precipitation and Obscuration: | | | |
| Departure Point: | (SAT) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | VFR |
| Departure Time: | 1240 CDT | Type of Airspace: | Class D; Class E |

Airport Information

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|----------------------|-------------------------|---------------------------|------------------------|
| Airport: | SAN ANTONIO INTL. (SAT) | Runway Surface Type: | Concrete |
| Airport Elevation: | 680 ft | Runway Surface Condition: | Dry |
| Runway Used: | 12 | IFR Approach: | None |
| Runway Length/Width: | 8600 ft / 100 ft | VFR Approach/Landing: | Full Stop; Straight-in |

Wreckage and Impact Information

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|---------------------|--------|----------------------|-------------|
| 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: | |

Administrative Information

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|-----------------------------------|--|---------------|------------|
| Investigator In Charge (IIC): | RAY WALL | Adopted Date: | 09/14/1993 |
| Additional Participating Persons: | FRED J CECH; SAN ANTONIO, TX | | |
| 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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