



# 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 -		

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## 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

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	47, 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>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	None Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	08/25/1992
<b>Occupational Pilot:</b>	<b>Last Flight Review or Equivalent:</b>		
<b>Flight Time:</b>	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

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

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 2500 ft agl	Visibility	6 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	30°C / 22°C
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

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

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

Investigator In Charge (IIC):	RAY WALL	Report 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 <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.ntsb.gov/pubdms/">http://dms.ntsb.gov/pubdms/</a> .		

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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](#).