



National Transportation Safety Board Aviation Accident Final Report

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

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 FAA 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

Aircraft Make:	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.	Operating Certificate(s) Held:	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 pubinquiry@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](#).