



Aviation Investigation Final Report

Location:	AUSTIN, Texas	Incident Number:	FTW95IA124
Date & Time:	February 27, 1995, 08:05 Local	Registration:	N369AE
Aircraft:	FAIRCHILD SA227-AC	Aircraft Damage:	None
Defining Event:		Injuries:	13 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Scheduled		

Analysis

WHILE FLARING TO LAND, THE RUDDER CABLE FOR THE LEFT RUDDER SEVERED DUE TO IMPROPER ROUTING DURING THE SCHEDULED REPLACEMENT OF THE CONTROL CABLES IN COMPLIANCE WITH AN AIRWORTHINESS DIRECTIVE. THE FLIGHT CREW REPORTED HEARING A POPPING SOUND FOLLOWED BY THE RUDDER PEDAL DEFLECTING TO THE STOP. CONTROL WAS MAINTAINED AND A NORMAL LANDING COMPLETED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: THE FAILURE OF THE MISROUTED RUDDER CONTROL CABLE DUE TO IMPROPER INSTALLATION DURING SCHEDULED REPLACEMENT TO COMPLY WITH AN AIRWORTHINESS DIRECTIVE.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FLT CONTROL SYST, RUDDER CONTROL CABLE/ROD - MISROUTED
2. (C) MAINTENANCE, COMPLIANCE WITH AD - IMPROPER - COMPANY MAINTENANCE PERSONNEL
3. (C) FLT CONTROL SYST, RUDDER CONTROL CABLE/ROD - FAILURE, TOTAL

Factual Information

On February 27, 1995, at 0805 central standard time, a Fairchild SA227-AC, N369AE, experienced a flight control malfunction while landing at the Robert Mueller Airport, near Austin, Texas. The airplane sustained no damage and was operated by Conquest Airlines of Austin, Texas, under an IFR flight plan as Conquest Flight 220. The airline transport rated pilot, the first officer, and their 11 passengers were uninjured. Instrument meteorological conditions prevailed for the 14 CFR Part 135 flight.

According to the operator, the crew reported that during the landing flare on runway 13R, they heard a popping sound followed by the rudder pedal deflecting to the stop while they cross-controlled to maintain runway alignment. Control was maintained and a normal landing completed. The airplane taxied to the gate without further incident.

Post flight inspection of the airplane revealed that the rudder cable (part number 27-70001-071) for the left rudder had severed due to improper routing during the scheduled replacement of the control cables (A.D. 87-02-02). Company quality control personnel determined that the cable was routed outside the upper aft cable guide. The chaffing against the structure of the aircraft resulted in failure of the cable assembly. The cable had accumulated 435.9 hours since installation.

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	32, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	January 30, 1995
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	9500 hours (Total, all aircraft), 2500 hours (Total, this make and model), 8000 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 200 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	FAIRCHILD	Registration:	N369AE
Model/Series:	SA227-AC SA227-AC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	AC-697
Landing Gear Type:	Retractable - Tricycle	Seats:	21
Date/Type of Last Inspection:	February 8, 1995 AAIP	Certified Max Gross Wt.:	14600 lbs
Time Since Last Inspection:	90 Hrs	Engines:	2 Turbo prop
Airframe Total Time:	10427 Hrs	Engine Manufacturer:	GARRETT
ELT:	Not installed	Engine Model/Series:	TPE 331-11U
Registered Owner:	STERLING CREDIT CORP.	Rated Power:	1000 Horsepower
Operator:	CONQUEST AIRLINES	Operating Certificate(s) Held:	Commuter air carrier (135)
Operator Does Business As:		Operator Designator Code:	SWHA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	AUS ,622 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	07:55 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	Scattered / 400 ft AGL	Visibility	2.5 miles
Lowest Ceiling:	Overcast / 1200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	18°C / 18°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	TYLER , TX (TYL)	Type of Flight Plan Filed:	IFR
Destination:	(AUS)	Type of Clearance:	IFR
Departure Time:	07:10 Local	Type of Airspace:	Class C

Airport Information

Airport:	ROBERT MUELLER MUNICIPAL AUS	Runway Surface Type:	Asphalt
Airport Elevation:	632 ft msl	Runway Surface Condition:	Dry
Runway Used:	13R	IFR Approach:	
Runway Length/Width:	7269 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	None
Passenger Injuries:	11 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	13 None	Latitude, Longitude:	30.300762,-97.690887(est)

Administrative Information

Investigator In Charge (IIC):	Casanova, Hector
Additional Participating Persons:	RALPH H RODRIGUEZ; SAN ANTONIO , TX
Original Publish Date:	October 19, 1995
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=19265

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).