



Aviation Investigation Final Report

Location:	SELMA, Alabama	Accident Number:	ATL97LA031
Date & Time:	December 30, 1996, 15:30 Local	Registration:	N7561Q
Aircraft:	Cessna 310Q	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot had elected to divert to Selma, Alabama after realizing his instrument charts were in the wing locker. While approximately 15 feet over the runway in a flared attitude, the pilot's seat back failed, leading him to lose control of the airplane and land hard. Subsequent examination of the seat showed it was incorrectly repaired and reassembled by a maintenance person, resulting in its eventual partial overload failure.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of maintenance personnel to correctly repair and install the pilot's seat.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FUSELAGE,SEAT - FAILURE,PARTIAL
2. (C) FUSELAGE,SEAT - OVERLOAD
3. (C) MAINTENANCE,MAJOR REPAIR - IMPROPER - OTHER MAINTENANCE PERSONNEL

Factual Information

On December 30, 1996, about 1530 central standard time, a Cessna 310Q, N7561Q, landed hard at the Craig Field Airport, Selma, Alabama. The airplane was operated by the pilot under the provisions of Title 14 CFR Part 91, and visual flight rules. Visual meteorological conditions prevailed. An instrument flight plan had been filed via radio, but had not been activated. There were no injuries to the commercial pilot nor his three passengers, and the airplane was substantially damaged. Origination of the flight was Montgomery, Alabama, about 1500, on the same day.

The pilot reported that they had stopped at Montgomery for lunch. After departing Montgomery, he air-filed an instrument flight plan. Afterwards, he realized that his charts were all in a wing locker, therefore, he elected to land at Selma to retrieve them. He stated that once over the runway, about 15 feet above the pavement, as he flared, his seat back broke, followed by the hard landing.

Subsequent examination of the seat back showed that it was assembled incorrectly which led to its failure on final approach. It was noted that the seat had been connected using a full thread bolt which caused excessive wear on the seat's attaching points. The correct bolt, washers, spacers, and nut should have been used as per the manufacturer's recommendations. It also appeared that a die grinder was used to remove the original seat weakening the metal in the seat frame.

Pilot Information

Certificate:	Commercial	Age:	38, 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:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 18, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1270 hours (Total, all aircraft), 75 hours (Total, this make and model), 1200 hours (Pilot In Command, all aircraft), 71 hours (Last 90 days, all aircraft), 39 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7561Q
Model/Series:	310Q 310Q	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310Q0532
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	December 12, 1996 Annual	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:	10 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	2836 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-470-VO
Registered Owner:	SUMMIT EQUITY MANAGEMENT, INC.	Rated Power:	260 Horsepower
Operator:	SAUL ZADIK	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MGM ,221 ft msl	Distance from Accident Site:	40 Nautical Miles
Observation Time:	15:53 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	Scattered / 3000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MONTGOMERY , AL (MGM)	Type of Flight Plan Filed:	IFR
Destination:	LITTLE ROCK , AR (1M1)	Type of Clearance:	IFR
Departure Time:	15:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	CRAIG FIELD SEM	Runway Surface Type:	Asphalt
Airport Elevation:	166 ft msl	Runway Surface Condition:	Dry
Runway Used:	15	IFR Approach:	None
Runway Length/Width:	8002 ft / 150 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	32.410114,-87.030281(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Preston
Additional Participating Persons:	GAYLE LIEURANCE; BIRMINGHAM , AL REGAN H CAMPBELL; ATLANTA , GA
Original Publish Date:	August 25, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=3815

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