



Aviation Investigation Final Report

Location:	MIDLAND, Texas	Accident Number:	FTW96LA351
Date & Time:	August 19, 1996, 12:20 Local	Registration:	N61609
Aircraft:	Cessna A185F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation		

Analysis

Witnesses stated that the airplane became airborne after a short takeoff roll and lifted off before reaching taxiway 'F.' They added that the airplane was established in a very steep climb attitude, as soon as it became airborne. Subsequently, it nosed down and impacted on the west edge of runway 16R, between taxiway 'F' and runway 10. Examination of the wreckage by an FAA inspector revealed that the elevator trim was in the full nose up position. The trim indicator confirmed the position of the elevator trim.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure of the pilot to obtain or maintain adequate airspeed, by allowing the airplane to enter an excessive nose high attitude and an excessive rate of climb after takeoff, which resulted in an inadvertent stall and subsequent collision with the terrain. A factor relating to the accident was: the pilot's inadequate preflight by failing to ensure proper elevator trim for takeoff.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
2. (F) STABILATOR TRIM - IMPROPER - PILOT IN COMMAND

3. (C) CLIMB - EXCESSIVE - PILOT IN COMMAND
4. (C) AIRSPEED - NOT OBTAINED/MAINTAINED - PILOT IN COMMAND
5. (C) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On August 19, 1996, at 1220 central daylight time, a Cessna A185F, N61609, was substantially damaged following a loss of control during takeoff near Midland, Texas. The airplane was owned and operated by Econorex Systems Inc., of Belton, Missouri. The instrument rated private pilot, sole occupant of the airplane, was seriously injured. The business flight was conducted under Title 14 CFR Part 91. Visual meteorological conditions prevailed for the planned cross country flight for which a flight plan was not filed.

According to authorities at the Midland International Airport, the airplane arrived at approximately 1250 and taxied to an FBO to refuel. After refueling, the airplane was cleared for takeoff from runway 16R at 1304. Witnesses at the airport stated that the airplane made a short takeoff roll and became airborne prior to reaching taxiway "F."

Witnesses added that the airplane established "a very steep climb attitude as soon as it became airborne, and subsequently nosed down" onto the west edge of runway 16R, between taxiway "F" and runway 10.

Examination of the wreckage by the FAA inspector revealed that the elevator trim was in the full nose up position. The trim indicator confirmed the position of the elevator trim.

Pilot Information

Certificate:	Private	Age:	64, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	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-w/ waivers/lim	Last FAA Medical Exam:	August 9, 1996
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3652 hours (Total, all aircraft), 3150 hours (Total, this make and model), 36 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N61609
Model/Series:	A185F A185F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18504235
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	October 13, 1995 Annual	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:	83 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1526 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-520-D3B
Registered Owner:	ECONOREX SYSTEMS INC.	Rated Power:	300 Horsepower
Operator:		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:	MAF ,2871 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	12:56 Local	Direction from Accident Site:	340°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots / 17 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	32°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(MAF)	Type of Flight Plan Filed:	None
Destination:	ALPINE , TX (E38)	Type of Clearance:	VFR
Departure Time:	12:19 Local	Type of Airspace:	Class C

Airport Information

Airport:	MIDLAND INTERNATIONAL MAF	Runway Surface Type:	Concrete
Airport Elevation:	2871 ft msl	Runway Surface Condition:	Dry
Runway Used:	16R	IFR Approach:	
Runway Length/Width:	9501 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Casanova, Hector
Additional Participating Persons:	DENNIS J HILL; LUBBOCK , TX EMILE J LOHMAN; WICHITA , KS
Original Publish Date:	December 23, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=19949

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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](#).