



Aviation Investigation Final Report

Location:	VIDOR, Texas	Accident Number:	FTW93LA219
Date & Time:	July 27, 1993, 08:30 Local	Registration:	N4134X
Aircraft:	AERO COMMANDER 100	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

DURING THE FORCED LANDING IN A FIELD, FOLLOWING A TOTAL LOSS OF ENGINE POWER, THE AIRPLANE HIT A DITCH AND NOSED OVER COMING TO REST UP RIGHT. EXAMINATION OF THE CONTROLS BY FEDERAL AVIATION ADMINISTRATION INSPECTORS REVEALED THAT THE MIXTURE CONTROL CABLE HAD SEPARATED AND THE THROTTLE POWER LEVER LINKAGE RETAINER WAS MISSING. AN OVERHAULED CARBURETOR WAS INSTALLED ON MAY 5, 1993.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: CONTROL CABLE SEPARATION DUE TO THE THROTTLE POWER LEVER LINKAGE NOT BEING SECURED BY RETAINER RESULTANT FROM IMPROPER INSTALLATION. A FACTOR WAS A LACK OF SUITABLE TERRAIN FOR THE FORCED LANDING.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE

Findings

1. (C) MIXTURE CONTROL,CABLE - SEPARATION
2. (C) THROTTLE/POWER LEVER,LINKAGE - NOT SECURED
3. (C) MAINTENANCE,INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

- 4. (F) TERRAIN CONDITION - NONE SUITABLE
 - 5. TERRAIN CONDITION - DITCH
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Occurrence #4: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

On July 27, 1993, at approximately 0830 central daylight time, an Aero Commander 100, N4134X, sustained substantial damage near Vidor, Texas, following a forced landing due to a loss of engine power. The commercial pilot was not injured. Visual meteorological conditions prevailed for the pipeline patrol flight.

During telephone interviews, conducted by the investigator in charge with the pilot and operator, the following information was revealed. The flight departed Lake Charles, Louisiana, and was en route with a final destination of Beaumont, Texas. During cruise flight at approximately 500 feet above the ground, there was a total loss of engine power. A forced landing was made to a wet field. During the landing roll, the nose wheel hit a ditch and the airplane nosed over, coming to rest up right.

Examination of the airplane by the Federal Aviation Administration inspectors revealed that the throttle mixture control cable was separated at the carburetor, the retainer for the cable was missing, and the control arm was in the shutoff position.

According to the maintenance records, which were reviewed by the investigator in charge, an overhauled carburetor was installed on May 5, 1993. On July 13, 1993, the carburetor heat control cable had been adjusted.

The airplane was released to the owner's representative following the investigation.

Pilot Information

Certificate:	Commercial	Age:	62, 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):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	April 23, 1993
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4000 hours (Total, all aircraft), 144 hours (Total, this make and model), 3500 hours (Pilot In Command, all aircraft), 208 hours (Last 90 days, all aircraft), 78 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AERO COMMANDER	Registration:	N4134X
Model/Series:	100 100	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	233
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	January 17, 1993 Annual	Certified Max Gross Wt.:	2250 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3922 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	O-320-A2B
Registered Owner:	CHENAULT, BRYAN E.	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:	CHENAULT AVIATION SERVICE	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BPT ,16 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	07:40 Local	Direction from Accident Site:	40°
Lowest Cloud Condition:	Scattered / 2500 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28°C / 26°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LAKE CHARLES , LA (LCH)	Type of Flight Plan Filed:	None
Destination:	BEAUMONT , TX (BMT)	Type of Clearance:	None
Departure Time:	08:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	30.119352,-94.000953(est)

Administrative Information

Investigator In Charge (IIC):	Smith, Joyce
Additional Participating Persons:	LEON H MCRAE; HOUSTON , TX
Original Publish Date:	September 13, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=18799

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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](#).