



Aviation Investigation Final Report

Location:	GHEENS, Louisiana	Accident Number:	FTW99LA186
Date & Time:	July 9, 1999, 17:05 Local	Registration:	N731AR
Aircraft:	Cessna A188B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The engine lost power following the first power reduction during the initial takeoff climb. The agricultural airplane was loaded with 1,000 pounds of rice seed. The pilot was able to dump the payload as he maneuvered the airplane to clear trees in his path. The airplane touched down in a marshy grass area. Upon touch down, the main landing gear tires sank in the soft mud, and the airplane nosed over, coming to rest in the inverted position, partially submerged in water. Examination of the wreckage by the operator and the FAA inspector revealed that the loss of engine power was the result of fuel starvation as result of a blocked fuel vent tube.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power due to fuel starvation as result of a blocked fuel vent. A factor was the lack of suitable terrain for the forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) FUEL SYSTEM, VENT - BLOCKED(TOTAL)
2. (C) FLUID, FUEL - STARVATION

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

Occurrence #3: NOSE OVER
Phase of Operation: EMERGENCY LANDING

Findings

- 3. TERRAIN CONDITION - SWAMPY
- 4. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

On July 9, 1999, at 1705 central daylight time, a Cessna A188B agricultural airplane, N731AR, was substantially damaged during a forced landing following a loss of engine power during climb out from an airstrip near Gheens, Louisiana. The instrument rated commercial pilot, sole occupant of the airplane, sustained minor injuries. The airplane was registered to and operated by Golden Ranch Aviation, Inc., of Gheens, Louisiana. Visual meteorological conditions prevailed for the Title 14 CFR Part 137 flight for which a flight plan was not filed. The flight originated from the operator's private airstrip approximately 5 minutes prior to the accident.

The pilot reported that the airplane was loaded with 1,000 pounds of rice seed to be dispensed to rice fields within the company's 27,000 acre ranch. He further reported that the engine lost power following his first power reduction during the initial takeoff climb. The pilot was able to dump the payload as he maneuvered the airplane to clear trees in his path. The airplane touched down in a marshy grass area. Upon touch down, the main landing gear tires sank in the soft mud, and the airplane nosed over, coming to rest in the inverted position, partially submerged in water.

The pilot reported that the left wing of the airplane separated from the airframe, the vertical stabilizer and rudder "were smashed," and the propeller assembly separated from the engine.

The pilot reported that the 300-horsepower Continental IO-520-D173B engine, serial number 812837-R, had accumulated 144.9 hours since its last factory overhaul. Examination of the wreckage by the pilot and the FAA inspector revealed that the loss of engine power was the result of fuel starvation as result of a blocked fuel vent tube. In the enclosed NTSB Form 6120.1/2, the pilot recommends installing small mesh wire over the fuel vents to prevent vent blockage from occurring.

Pilot Information

Certificate:	Commercial	Age:	28, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	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:	March 2, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2500 hours (Total, all aircraft), 500 hours (Total, this make and model), 2400 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 150 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N731AR
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	188-02748T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 3, 1999 Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:	19 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6346 Hrs	Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	IO-520-D
Registered Owner:	GOLDEN RANCH AVIATION, INC.	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	
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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	29°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:00 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 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	29.690414,-90.489692(est)

Administrative Information

Investigator In Charge (IIC):	Casanova, Hector
Additional Participating Persons:	EDGAR C BUSH; BATON ROUGE , LA
Original Publish Date:	September 7, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=46757

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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](#).