



Aviation Investigation Final Report

Location: Nickerson, Kansas Accident Number: CHI02LA223

Date & Time: July 30, 2002, 20:50 Local Registration: N9639G

Aircraft: Cessna A188B Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 137: Agricultural

Analysis

The airplane struck a berm during a forced landing resulting in substantial damage. The pilot reported he was finishing spraying a field when he "encountered an unscheduled power rollback." He executed a forced landing to an alfalfa field. During the landing roll the airplane impacted a berm and sustained substantial damage. The inspection of the airplane's fuel system revealed the fuel strainer was blocked with a black rubber like substance. The fuel truck that fueled the airplane was checked for contaminates. The same type of substance that was found in the airplane's fuel filter strainer was found in the tank of the refueling truck.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Fuel starvation due to the fuel contamination, the blocked fuel strainer, and the refueling truck's contaminated fuel. A factor was the berm.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL

Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (C) FUEL SYSTEM, STRAINER - BLOCKED (TOTAL)

- 2. (C) FLUID, FUEL CONTAMINATION, OTHER THAN WATER
- 3. (C) FLUID, FUEL STARVATION
- 4. (C) AIRPORT FACILITIES, REFUELING TRUCK/EQUIPMENT IMPROPER

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

5. (F) TERRAIN CONDITION - BERM

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Factual Information

On July 30, 2002, at 2050 central daylight time, a Cessna A188B, N9639G, operated by Ellinwood Flying Service, was substantially damaged during a forced landing following a loss of engine power while spraying an agricultural field. Visual meteorological conditions prevailed at the time of the accident. The 14 CFR Part 137 aerial application flight was not operating on a flight plan. The commercial pilot reported no injuries. The local flight originated from the Rice County Municipal Airport (LYO), Lyons, Kansas, at 2020.

The pilot reported he was finishing spraying a field when he "encountered an unscheduled power rollback." He executed a forced landing to an alfalfa field since the available power was insufficient to sustain flight. During the landing roll the airplane impacted a berm and received substantial damage.

The inspection of the airplane's fuel system revealed the fuel strainer was blocked with a black rubber like substance. The fuel truck that fueled the airplane was checked for contaminates. The same type of substance that was found in the airplane's fuel filter strainer was found in the tank of the refueling truck.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	47,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	February 1, 2002
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	January 8, 2001
Flight Time:	5159 hours (Total, all aircraft), 175 hours (Total, this make and model), 4753 hours (Pilot In Command, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9639G
Model/Series:	A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18801575
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	July 3, 2002 100 hour	Certified Max Gross Wt.:	4200 lbs
Time Since Last Inspection:	25 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3818 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	IO-520-D
Registered Owner:	Ellenwood Flying Service	Rated Power:	300 Horsepower
Operator:	ELLINWOOD FLYING SERVICE INC	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	BWDG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HUT,1542 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	20:51 Local	Direction from Accident Site:	150°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	28°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lyons, KS (LYO)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	20:20 Local	Type of Airspace:	Class G

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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:	38.13972,-98.079368(est)

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Administrative Information

Investigator In Charge (IIC): SILLIMAN, JIM

Additional Participating Persons:

Original Publish Date: May 13, 2003

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=55348

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

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