



# Aviation Investigation Final Report

<b>Location:</b>	SAINT CHARLES, Missouri	<b>Accident Number:</b>	CHI96LA239
<b>Date &amp; Time:</b>	July 15, 1996, 10:15 Local	<b>Registration:</b>	N9703J
<b>Aircraft:</b>	Cessna                      A188B	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

While conducting aerial application maneuvers, the pilot noticed a partial loss of engine power. The pilot tried to climb over the trees but was unable to due to the loss of airspeed. He was unable to dump his chemical load and impacted terrain hard. No discrepancies were found with the engine or dump valve.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a partial loss of engine power due to undetermined reasons and the pilot's failure to maintain aircraft control. The factors involved were the pilot did not perform load jettison and low airspeed.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL  
Phase of Operation: MANEUVERING - AERIAL APPLICATION

### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED  
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Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

2. (F) LOAD JETTISON - NOT PERFORMED - PILOT IN COMMAND

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Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: EMERGENCY LANDING

Findings

3. (F) AIRSPEED - LOW - PILOT IN COMMAND

4. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

## Factual Information

On July 15, 1996, at 1015 central daylight time (cdt), a Cessna A188B, N9703J, registered to W. L. S. Flying Service, of Litchfield, Illinois, was substantially damaged following a partial loss of engine power and subsequent forced landing in a farmer's field approximately 1/4 mile north of the Saint Charles County Airport, Saint Charles, Missouri. The commercial pilot reported no injuries. The 14 CFR Part 137 aerial application flight was not operating on a flight plan. Visual meteorological conditions prevailed at the time of the accident. The flight departed from the Saint Charles County Airport, Saint Charles, Missouri, at 1005 cdt.

According to the pilot's written statement, he loaded the airplane with 1,000 pounds of millet seed and 3/4 of a tank of 100 low lead fuel (40 gallons). The takeoff and climb out were normal. The pilot conducted three to four aerial application passes when he noticed that the airplane's engine "...was running smooth but with a definite loss of power." The pilot tried to climb over the tall trees but lost a lot of airspeed. The pilot stated, "At this point, the airplane was very difficult to control. I had to push full forward just to keep from stalling. The airplane never did stall, but because the plane was loaded, the landing was very hard." Before impact with the terrain, the pilot attempted to dump the load with out success. The pilot stated, "Everything seemed to happen in just a few seconds, and my main concern was to try to keep the plane flying."

A Federal Aviation Administration (FAA) Principal Maintenance Inspector (PMI), represented the NTSB on-scene. The PMI inspected the engine and accessories. No discrepancies were found.

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	37, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	April 30, 1996
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2410 hours (Total, all aircraft), 1590 hours (Total, this make and model), 2300 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N9703J
<b>Model/Series:</b>	A188B A188B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	18803841T
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	March 20, 1996 Annual	<b>Certified Max Gross Wt.:</b>	4200 lbs
<b>Time Since Last Inspection:</b>	74 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3086 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	IO-520-D
<b>Registered Owner:</b>	W. L. S. FLYING SERVICE	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	STL ,605 ft msl	<b>Distance from Accident Site:</b>	11 Nautical Miles
<b>Observation Time:</b>	09:55 Local	<b>Direction from Accident Site:</b>	340°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	9 knots / 17 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	280°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 19°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(3SZ )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(3SZ )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:05 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	Dry;Vegetation
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	38.789371,-90.509506(est)

## Administrative Information

**Investigator In Charge (IIC):** Carlson, Todd

**Additional Participating Persons:** JUNE L TONSING; ST. ANN , MO  
ROGER L HELMS; ST. ANN , MO

**Original Publish Date:** December 23, 1996

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=10309>

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