



# Aviation Investigation Final Report

<b>Location:</b>	SEMINOLE, Texas	<b>Accident Number:</b>	FTW00LA024
<b>Date &amp; Time:</b>	November 3, 1999, 14:10 Local	<b>Registration:</b>	N72062
<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

The agricultural airplane collided with two powerlines suspended approximately 20 feet above cotton fields in a north-south direction. The pilot reported that he was in the process of aligning the SATLOC equipped airplane for the first pass on the 320-acre field that he intended to spray. The pilot was on a westerly heading 'over a brownish colored matured cotton field and he never saw the dull aluminum wires' that the airplane collided with. The pilot added that the two electrical wires were severed after impacting the top of the windshield, the upper portion of the vertical stabilizer, and the rudder assembly. The rudder assembly was partially ripped from its mounts and jammed 'in a marked right rudder deflection.' After flying through the powerlines, the pilot attempted to continue straight ahead on a westerly heading; however, the rudder was pulling the airplane into a right turn, which he could not control with full opposite aileron. The pilot stated that when he could no longer maintain control of the airplane, he extended the flaps and 'crashed into a cotton field in a right wing low attitude.'

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain clearance with the powerlines.

### Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. OBJECT - WIRE, TRANSMISSION
2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

## Factual Information

On November 3, 1999, at 1410 central standard time, a Cessna A188B agricultural airplane, N72062, was substantially damaged during impact with powerlines and terrain while maneuvering near Seminole, Texas. The instrument rated commercial pilot, sole occupant of the airplane, was not injured. The airplane was registered to and operated by Addison Flying Service, Inc., of Seminole, Texas. Visual meteorological conditions prevailed for Title 14 CFR Part 137 flight for which a flight plan was not filed. The flight originated from the operator's private airstrip, known as Hamilton Airport (5TA0) near Seminole, Texas, approximately 5 minutes prior to the accident.

According to personnel from the Texas Department of Public Safety, who responded to the accident site, the airplane collided with two powerlines suspended approximately 20 feet above cotton fields in a north-south direction. The accident site was located approximately 10 miles northeast of the airplane's home base. There were no reported eyewitnesses to the accident.

The pilot reported to the NTSB investigator-in-charge, that he was in the process of aligning the SATLOC equipped airplane for the first pass over a 320-acre field that he intended to spray. The airplane was on a westerly heading "over a brownish colored matured cotton field and he never saw the dull aluminum wires" that the airplane collided with. The pilot added that the two electrical wires were severed after impacting the top of the windshield, the upper portion of the vertical stabilizer, and the rudder assembly. The rudder assembly was partially ripped from its mounts and jammed in a "marked right rudder deflection."

The pilot stated that after flying through the powerlines, he attempted to continue straight ahead on a westerly heading; however, the rudder was pulling the airplane into a right turn which he could not control with full opposite aileron. Control of the airplane continued to decay as the airspeed diminished. The pilot added that when he could no longer maintain control of the airplane, he extended the flaps and "crashed into a cotton field in a right wing low attitude."

The airplane came to rest in the upright position, approximately 1/2 mile northwest of where the airplane collided with the powerlines. The cockpit of the airplane was not compromised during the accident sequence. The pilot was able to egress from the wreckage unassisted. The 10,000-hour pilot, who was wearing a flight helmet, stated that the seat belt and shoulder harness were replaced by the operator prior to the start of the spray season.

The FAA inspector, who traveled to the accident site, stated that a 10-inch section of the rudder and vertical stabilizer were missing from the wreckage and were found in the area adjacent to the two severed powerlines. The two main landing gears, as well as the tail wheel

assembly, separated from the airframe. The engine assembly was found separated from the airframe, and the propeller assembly remained attached to the engine crankshaft. The hopper was not compromised and contained approximately 25 gallons of herbicide.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	60, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	July 23, 1999
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	10000 hours (Total, all aircraft), 2000 hours (Total, this make and model), 9500 hours (Pilot In Command, all aircraft), 276 hours (Last 90 days, all aircraft), 120 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N72062
<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>	188-019442T
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	April 15, 1999 Annual	<b>Certified Max Gross Wt.:</b>	3300 lbs
<b>Time Since Last Inspection:</b>	438 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	6489 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	IO-520-D
<b>Registered Owner:</b>	ADDISON FLYING SERVICE, INC.	<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>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<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>	10 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	270°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	24°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(5TA0)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:00 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>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## 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>	32.709064,-102.65007(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Casanova, Hector
<b>Additional Participating Persons:</b>	MARK W MACDONALD; LUBBOCK , TX
<b>Original Publish Date:</b>	June 23, 2000
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=47688">https://data.nts.gov/Docket?ProjectID=47688</a>

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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](#).