



Aviation Investigation Final Report

Location:	PIONEER, Louisiana	Accident Number:	FTW00LA166
Date & Time:	June 1, 2000, 07:00 Local	Registration:	N70114
Aircraft:	Cessna A188B	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The airplane departed with full fuel and 150 gallons of herbicide for a local aerial application flight. The airplane made three north-south spray runs, and during the third turn from the south to the north, the airplane contacted trees, the left wing separated, and subsequently, the airplane impacted the ground. A witness stated that during the third turn he could hear, but could 'barely see the aircraft over the tree tops, unlike the previous two times.' A friend of the accident pilot, who is also an agricultural pilot for the same operator, reported that on the evening of May 31, 2000, (one day prior to the accident flight) the accident pilot reported that he had 'hit some trees on that day and had to pull the leaves out of the boom of the airplane.' The accident pilot had also reported that 'he had the power lines licked, but seemed to have a problem clearing the tree tops.' The pilot had successfully completed a professional agricultural pilot training course on May 5, 2000, and the accident flight was the pilot's second revenue spray flight.

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 trees while maneuvering during an aerial application flight. A factor was the pilot's lack in experience with aerial application flight operations.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. OBJECT - TREE(S)
2. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
3. (F) LACK OF EXPERIENCE - PILOT IN COMMAND

Factual Information

On June 1, 2000, at 0700 central daylight time, a Cessna A188B agricultural airplane, N70114, was substantially damaged when it impacted terrain while maneuvering near Pioneer, Louisiana. The commercial pilot, sole occupant of the airplane, sustained fatal injuries. The airplane was registered to and operated by Pioneer Flying Service Inc., of Pioneer. Visual meteorological conditions prevailed and a flight plan was not filed for the 14 Code of Federal Regulations Part 137 aerial application flight. The flight originated from the operator's private grass airstrip, at 0635.

According to the operator and his personnel, the airplane's fuel tanks were topped off and the airplane departed with 150 gallons of Trefend (herbicide) on board to spray a nearby field. Witnesses reported that prior to the accident, they observed the airplane making north-south passes over a field. One witness stated that from his view, he saw the airplane make two 180 degree turns from the south to the north, one following each of the first two southbound spray runs. He stated that during the airplane's third turn he could hear, but could "barely see the aircraft over the trees tops, unlike the previous two times." Another witness stated that he was working in the area when he heard a "loud pop," looked, and observed the airplane pointed straight up over the trees. Subsequently, the airplane passed out of the witnesses' view behind trees.

According to an FAA inspector and a representative from Cessna Aircraft Company, who examined the accident site and airplane, the airplane was heading approximately 190 degrees when it initially contacted trees that were approximately 50 feet tall. The airplane traveled an additional 200 feet before the airplane's left wing contacted a second area of trees that were approximately 70 feet tall. Subsequently, the left wing separated from the airframe and the airplane descended to the ground. The engine separated from the airframe, and the propeller blades, which remained attached to the propeller hub, were loose and exhibited "S" type bending. Flight control continuity was established from the rudder and elevator to the forward cockpit. Aileron flight control continuity was established between the right wing's aileron and the cabin area; the left wing's aileron cable was separated at the wing's mid-span. The throttle, mixture, and propeller controls were found in the full forward position.

A friend of the accident pilot, who is also a pilot for Pioneer Flying Service, was interviewed following the accident. He stated that on the evening of May 31, 2000, the accident pilot mentioned that he had "hit some trees on that day and had to pull the leaves out of the boom of the airplane." The accident pilot added that "he had the power lines licked, but seemed to have a problem clearing the tree tops."

A review of the pilot's flight logbook and flight training records revealed that he received his commercial certificate on April 25, 2000, and successfully completed a professional

agricultural pilot training course administered by Ag-Flight, Inc., of Bainbridge, Georgia, on May 5, 2000. He had accumulated a total of 586 flight hours during the nine month period preceding the accident. Two hundred fourteen of his total flight hours were in the make and model of the accident airplane, and had been accumulated during a one month period preceding the accident. The operator reported that the accident flight was the pilot's second revenue spray flight.

Pilot Information

Certificate:	Commercial	Age:	21, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 22, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	586 hours (Total, all aircraft), 214 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N70114
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18801840T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 1, 2000 Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	IO-520-D
Registered Owner:	PIONEER FLYING SERVICE INC.	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	JOBG

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:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	, LA (NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	
Departure Time:	06:35 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	32.729587,-91.429206(est)

Administrative Information

Investigator In Charge (IIC):	Ragogna, Jason
Additional Participating Persons:	PAUL A KEESLER; BATON ROUGE , LA
Original Publish Date:	April 19, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=49364

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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](#).