



Aviation Investigation Final Report

Location: Garden City, Texas Accident Number: DFW07CA181

Date & Time: August 8, 2007, 08:05 Local Registration: N4827J

Aircraft: Cessna A188B Aircraft Damage: Substantial

Defining Event: 1 Serious

Flight Conducted Under: Part 137: Agricultural

Analysis

A single-engine agricultural airplane collided with a cotton trailer while performing an aerial application flight. The 1,296-hour commercial pilot was maneuvering the airplane to fly under power transmission lines when the airplane collided with a parked cotton trailer, lost directional control, and impacted the ground. The operator reported that the pilot was unable to recall the flight due to a concussion sustained during the accident. The operator further stated that a contributing factor was the fact that the pilot was used to flying a 680-horsepower turbine powered airplane and had recently been assigned a 300-horsepower airplane. An eyewitness reported observing the airplane performing the turn to reverse direction before losing sight of the aircraft prior to impact. Additionally, the eyewitness reported that the engine sounded "normal." There were no reported aircraft anomalies prior to the accident.

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 ground equipment while maneuvering. A contributing factor was the power lines along the pilot's application path.

Findings

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

Findings

1. OBJECT - VEHICLE

2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

3. (F) OBJECT - WIRE, TRANSMISSION

Occurrence #2: LOSS OF CONTROL - IN FLIGHT Phase of Operation: DESCENT - UNCONTROLLED

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

4. TERRAIN CONDITION - GROUND

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Factual Information

A single-engine agricultural airplane collided with a cotton trailer while performing an aerial application flight. The 1,296-hour commercial pilot was maneuvering the airplane to fly under power transmission lines when the airplane collided with a parked cotton trailer, lost directional control, and impacted the ground. The operator reported that the pilot was unable to recall the flight due to a concussion sustained during the accident. The operator further stated that a contributing factor was the fact that the pilot was used to flying a 680-horsepower turbine powered airplane and had recently been assigned a 300-horsepower airplane. An eyewitness reported observing the airplane performing the turn to reverse direction before losing sight of the aircraft prior to impact. Additionally, the eyewitness reported that the engine sounded "normal." There were no reported aircraft anomalies prior to the accident.

Pilot Information

Certificate:	Commercial	Age:	19,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	August 1, 2006
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 1, 2006
Flight Time:	1296 hours (Total, all aircraft), 785 hours (Total, this make and model), 1210 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N4827J
Model/Series:	A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18803770T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 1, 2007 Annual	Certified Max Gross Wt.:	4200 lbs
Time Since Last Inspection:	300 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3550 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	IO-520-D
Registered Owner:	Bert L Bruton	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:	Bruton Aerial Spray Incorporated	Operator Designator Code:	

Meteorological Information and Flight Plan

meteorological informati			
Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MAF	Distance from Accident Site:	37 Nautical Miles
Observation Time:	07:53 Local	Direction from Accident Site:	330°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	23°C / 20°C
Precipitation and Obscuration:			
Departure Point:	Garden City, TX	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:00 Local	Type of Airspace:	

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Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	31.819444,-101.478889

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Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	Arturo Castillo; Lubbock, Texas
Original Publish Date:	October 31, 2007
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=66426

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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