



Aviation Investigation Final Report

Location:	Wilson, Arkansas	Accident Number:	GAA16CA512
Date & Time:	September 6, 2016, 10:30 Local	Registration:	N519EP
Aircraft:	Air Tractor AT802	Aircraft Damage:	Substantial
Defining Event:	Tailstrike	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

According to the pilot, he was on his sixth agricultural application pass of the third field for the day. He reported that, during that pass, the airplane's tail struck "unseen powerlines." He recalled that the power lines crossed the field at an angle and that the power line poles were hidden by trees on both sides of the field. The pilot flew to a nearby airport and landed without further incident. The vertical stabilizer and the rudder sustained substantial damage.

Title 14 *Code of Federal Regulations* Part 137.19 (e) states, in part,

Knowledge and skill tests. The applicant must show, or have the person who is designated as the chief supervisor of agricultural aircraft operations for him show, that he has satisfactory knowledge and skill regarding agricultural aircraft operations, as described in paragraphs (e)(1) and (2) of this section.

(1)(i) Steps to be taken before starting operations, including survey of the area to be worked. ...

(1)(vi) Safe flight and application procedures.

During an interview with the operator, the investigator-in-charge (IIC) asked if documented training was provided to pilots regarding the location of wire hazards for the area of operation, and the operator responded that it did not provide this information to its pilots. At the request of the IIC, the operator agreed to provide documented, local area power line and obstacle avoidance training to pilots who perform application operations. The operator has completed the recommended training.

The pilot reported that there were no mechanical failures or anomalies with the airframe or engine that would have prevented normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to adequately survey the area of operation and his subsequent failure to maintain clearance from power lines during an agricultural application flight.

Findings

Personnel issues	Flight planning/navigation - Pilot
Aircraft	Altitude - Not attained/maintained
Environmental issues	Wire - Effect on operation
Organizational issues	Initial training - Operator
Organizational issues	Personnel records - Operator

Factual Information

History of Flight

Enroute	Low altitude operation/event
Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)
Other	Tailstrike (Defining event)

Pilot Information

Certificate:	Commercial	Age:	44,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
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:	November 3, 2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 28, 2016
Flight Time:	(Estimated) 8482.4 hours (Total, all aircraft), 360 hours (Total, this make and model), 8412.4 hours (Pilot In Command, all aircraft), 214.1 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N519EP
Model/Series:	AT802	Aircraft Category:	Airplane
Year of Manufacture:	2015	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	802-0263
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	August 21, 2016 100 hour	Certified Max Gross Wt.:	16000 lbs
Time Since Last Inspection:		Engines:	1 Turbo prop
Airframe Total Time:	633 Hrs at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	Not installed	Engine Model/Series:	PT6A-65AG
Registered Owner:		Rated Power:	1295 Horsepower
Operator:		Operating Certificate(s) Held:	Agricultural aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KNQA, 320 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	14:50 Local	Direction from Accident Site:	133°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	29°C / 25°C
Precipitation and Obscuration:			
Departure Point:	Wilson, AR (PVT)	Type of Flight Plan Filed:	None
Destination:	Wilson, AR	Type of Clearance:	None
Departure Time:	10:10 Local	Type of Airspace:	Class G

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:	33.419162, -93.060462(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Scott Olson; FAA; Little Rock, AR
Original Publish Date:	April 10, 2017
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=94088

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