



Aviation Investigation Final Report

Location: HART, Texas Accident Number: FTW99LA239

Date & Time: August 25, 1999, 14:30 Local Registration: N15119

Aircraft: Air Tractor AT-401 Aircraft Damage: Substantial

Defining Event: 1 Minor

Flight Conducted Under: Part 137: Agricultural

Analysis

The pilot failed to maintain clearance with power lines during an aerial application flight. The pilot maneuvered the agricultural airplane under some wires and around a tree. During the maneuver, the airplane's right wing clipped the wires, and the airplane impacted the ground.

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 power lines.

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

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - GROUND

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Factual Information

On August 25, 1999, at 1430 central daylight time, an Air Tractor AT-401 agricultural airplane, N15119, was substantially damaged during impact with wires and terrain while maneuvering near Hart, Texas. The airplane was registered to and operated by Central Plains Spraying, Inc., of Hart, Texas. The commercial pilot, who was the sole occupant, received minor injuries. Visual meteorological conditions prevailed and a company flight plan was filed for the 14 Code of Federal Regulations Part 137 aerial application flight. The local flight originated approximately 1400 from the operator's private airstrip.

During a telephone interview conducted by the NTSB investigator-in-charge, the pilot stated that he was spraying fields in the local area. At the west end of the fields, there were power lines oriented north-south, supported by two poles. A pond was located below the power lines and between the support poles. According to the pilot, the pond was a little larger than usual due to the extra rainfall the area had experienced this year. The pilot added that some of the crops had been destroyed because the pond area had expanded. The pilot, therefore, decided that he would have enough room to fly over the power lines instead of flying under them, which is what his usual practice was for these fields. As the pilot initiated a westbound climb over the lines, he realized that he "misjudged his ability to clear the top wires." Subsequently, the pilot elected to "dive down under the wires." As the pilot maneuvered under the wires, he had to divert to the left around an 8 foot tree located below the power lines. He added that he "over-controlled the airplane while turning to the left" and then "felt a hard jerk." The pilot could not recall any more of the event.

The airplane came to rest inverted in a field 211 feet west of the power lines. The FAA inspector, who visited the accident site, stated that the right wing had "clipped" the power lines, and the left wing subsequently impacted the ground below the power lines. According to the inspector, the wing spars and forward fuselage sustained structural damage. Additional damage was sustained to the propeller, the engine, and the hopper.

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Pilot Information

Certificate:	Commercial; Flight instructor	Age:	66,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	January 28, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	14000 hours (Total, all aircraft), 3000 hours (Total, this make and model), 13800 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N15119
Model/Series:	AT-401 AT-401	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	401-0831
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 16, 1999 Annual	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:	262 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2207 Hrs	Engine Manufacturer:	P&W
ELT:		Engine Model/Series:	1340-AN1
Registered Owner:	CENTRAL PLAINS SPRAYING, INC.	Rated Power:	600 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	LMAG

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AMA ,3605 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	15:00 Local	Direction from Accident Site:	30°
Lowest Cloud Condition:	Scattered / 6500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 18 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	32°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ition	
Departure Point:	(NONE)	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:	14:00 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 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	34.380401,-102.109611(est)

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Administrative Information

Investigator In Charge (IIC): Lupino, Nicole

Additional Participating Persons:

Original Publish Date: June 22, 2000

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=47200

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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