

# **Aviation Investigation Final Report**

PIPELINE

Location:	DES ARC, Arkansas		Accident Number:	FTW93LA114
Date & Time:	March 30, 1993, 09:15 I	₋ocal	Registration:	N4437S
Aircraft:	AIR TRACTOR	AT-301	Aircraft Damage:	Destroyed
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural			

#### Analysis

THE PILOT REPORTED THAT DURING AGRICULTURE SPRAYING OPERATIONS THE WEATHER CONDITIONS BEGAN TO DETERIORATE. HE DECIDED TO RETURN TO HIS PRIVATE AIR STRIP. DURING THE RETURN FLIGHT LIGHTNING STRUCK IN CLOSE PROXIMATELY TO THE AIRCRAFT, RESULTING IN PILOT'S LOSS OF OUTSIDE VISUAL REFERENCES. THE AIRPLANE DESCENDED OUT OF CONTROL TO GROUND IMPACT. JUST PRIOR TO IMPACT THE PILOT WAS ABLE TO LEVEL THE WINGS OF THE AIRPLANE.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S LOSS OF OUTSIDE VISUAL REFERENCE AND LOSS OF CONTROL.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: MANEUVERING

Findings

1. WEATHER CONDITION - LIGHTNING

2. (C) VISUAL LOOKOUT - REDUCED - PILOT IN COMMAND

3. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

## **Factual Information**

On March 30, 1993, at approximately 0915 central standard time (CST) an Air Tractor AT 301, N4437S, was destroyed on ground impact following a wire strike near Hickory Plains, Arkansas. The commercial pilot, also the owner and operator, was not injured. Weather was visual meteorological conditions.

The pilot reported to a Federal Aviation inspector that as he was maneuvering for continued spraying operations lightning struck an electrical power line to his immediate front. He reported that the bright flash caused him to lose his sight momentarily and he flew into the wire and descended uncontrollably to ground impact.

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Certificate:	Commercial; Flight instructor	Age:	34,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 single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	March 12, 1993
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5431 hours (Total, all aircraft), 80 hours (Total, this make and model), 5330 hours (Pilot In Command, all aircraft), 80 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

#### **Pilot Information**

#### Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR	Registration:	N4437S
Model/Series:	AT-301 AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0097
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	December 12, 1992 Annual	Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:	85 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5600 Hrs	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R1340-AN1
Registered Owner:	MCCONNAUGHHAY, KEN	Rated Power:	600 Horsepower
Operator:	MCCONNAUGHHAY, KENNETH W.	Operating Certificate(s) Held:	
Operator Does Business As:	KENS FLYING SERVICE	Operator Designator Code:	

# 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	6 miles
Lowest Ceiling:	Broken / 1000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	19°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:	(NONE)	Type of Clearance:	None
Departure Time:	07:00 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	34.969005,-91.4999(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Ellis, Matthew	
Additional Participating Persons:	NEAL VINES; LITTLE ROCK , AR	
Original Publish Date:	February 10, 1994	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=18719	

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 <u>here</u>.