



Aviation Investigation Final Report

Location:	Westmorland, California	Accident Number:	LAX02LA203
Date & Time:	June 20, 2002, 00:40 Local	Registration:	N8719S
Aircraft:	Air Tractor AT-301	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot was conducting a night aerial application flight spraying a cotton field from east to west, starting on the north side of the field. Power lines, approximately 40 to 60 feet high, bordered the field on the south. On the pilot's next to the last pass, and after pulling up out of the field and maneuvering to reverse direction, the airplane impacted the power lines with its left wing, subsequently impacting a paved road in an inverted position where a post-crash fire ensued. No preimpact mechanical failures were found during an examination of the wreckage.

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 power lines while maneuvering during an aerial application flight. A factor was the dark night condition.

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
3. (F) LIGHT CONDITION - DARK NIGHT

Factual Information

HISTORY OF FLIGHT

On June 20, 2002, approximately 0040 Pacific daylight time, an Air Tractor AT-301 agricultural airplane, N8719S, was destroyed when it impacted power lines and terrain while maneuvering near Westmorland, California. The commercial pilot, the sole occupant of the aircraft, was fatally injured. The airplane was registered to and operated by Val-Air Co. Inc. of Brawley, California. Visual meteorological conditions prevailed, and no flight plan was filed for the 14 CFR Part 137 aerial application flight. The local flight departed a private airstrip near Brawley at 0010.

In written statements provided to the NTSB investigator-in-charge, the owner reported the pilot was spraying a 70 acre cotton field from west to east, starting on the north side of the field. Power lines, approximately 40 to 60 feet high, bordered the south side of the field. One of the ground flagmen stated that on the next to the last pass flying to the east, the pilot pulled up out of the field, made a left turn, then a right turn to reverse direction. During the right turn the airplane's left wing struck the power lines, caught on fire and impacted a paved road which bordered the field on the south. The airplane came to rest inverted and oriented in a southwest direction.

PERSONAL INFORMATION

At the time of the accident the pilot held a commercial pilot certificate for single engine land, and instrument airplane. The pilot reported on his most recent airman medical application a total time of 11,000 flight hours, with 300 flight hours in the last 6 months. The operator reported that the pilot's most recent biennial flight review occurred on June 29, 2000, and that this was the first season that the pilot had worked for the operator. In telephone interviews with the NTSB investigator-in-charge, previous operators for whom the pilot had been employed indicated the pilot had several years of night aerial application experience.

FAA records indicated that the pilot was issued a second-class medical certificate on March 25, 2002, with no waivers or limitations.

AIRCRAFT INFORMATION

The airplane, a restricted category Air Tractor AT-301, serial number 301-0178, was powered by a Pratt & Whitney R-1340 AN-1 engine rated at 600 horsepower. Maintenance records indicated that the airplane's last inspection, an annual inspection, was completed on March 11, 2002. The airframe's total time was approximately 10,803 hours.

WRECKAGE AND IMPACT INFORMATION

A Federal Aviation Administration airworthiness inspector from the San Diego, California, Flight Standards District Office responded to the accident site. The inspector reported the accident site was approximately 3/10 of a mile east of the field being sprayed, and that the airplane came to rest in an inverted position on an asphalt road which bordered the south side of the field. The nose of the airplane was oriented in a southwesterly direction.

Aircraft damage consisted of the left wing, left horizontal stabilizer, left elevator, and the right landing gear separated from the airplane. The engine remained attached to the airframe. The propeller remained attached to the engine and a 3/4 inch steel power line wire was wrapped around the engine and hub of the propeller. A post-impact fire had consumed the airplane from the cockpit forward, as well as the left side of the fuselage from the rear of the cockpit to the left horizontal stabilizer.

A subsequent examination by the NTSB investigator-in-charge confirmed flight control continuity.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy of the pilot was conducted by the Imperial County Coroner, Brawley, California, on June 22, 2002. According to the autopsy report, the pilot's cause of death was attributed to blunt impact injuries of the head, neck, and cheek.

The FAA Civil Aeromedical Institute (CAMI), Oklahoma City, Oklahoma, conducted toxicology testing on the pilot. According to the postmortem toxicology report, results were negative for carbon monoxide, cyanide, ethanol and illegal drugs.

ADDITIONAL INFORMATION

An inspector from the FAA San Diego Flight Standards District Office released the wreckage to the aircraft operator on June 21, 2002. The wreckage was then transported to a salvage facility located in Phoenix, Arizona.

Pilot Information

Certificate:	Commercial	Age:	52, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 25, 2002
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 29, 2000
Flight Time:	11000 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N8719S
Model/Series:	AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0178
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 11, 2002 Annual	Certified Max Gross Wt.:	5000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	10803 Hrs as of last inspection	Engine Manufacturer:	Pratt & Whitney
ELT:	Not installed	Engine Model/Series:	R 1340
Registered Owner:	Val Air Co. Inc.	Rated Power:	600 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	LSVG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	IPL,56 ft msl	Distance from Accident Site:	14 Nautical Miles
Observation Time:	23:53 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.61 inches Hg	Temperature/Dew Point:	26°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Brawley, CA	Type of Flight Plan Filed:	None
Destination:	Westmoreland, CA	Type of Clearance:	None
Departure Time:	00:10 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	33.038333,-115.564445

Administrative Information

Investigator In Charge (IIC):	Little, T.
Additional Participating Persons:	Deron Kong; Federal Aviation Administration; San Diego, CA
Original Publish Date:	May 30, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=55000

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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](#).