



Aviation Investigation Final Report

Location:	Lake Wales, Florida	Accident Number:	ATL04LA177
Date & Time:	September 11, 2004, 05:28 Local	Registration:	N962AB
Aircraft:	Piper PA-23-250	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 137: Agricultural		

Analysis

During a night Mosquito Control Spraying operation the airplane collided with a 520-foot television tower 20-feet below the top. Witnesses stated they could hear the airplane and could see its marker lights, but did not see lights on the tower. At 0330, an automobile accident knocked out electrical power which included electrical power to the television tower. The pilot did not obtain a weather or preflight briefing prior to the flight which would have also provided him with NOTAM information stating that the power and lights had failed on the tower. There were no mechanical problems reported by the pilot or discovered during the post-accident examination 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 inadequate preflight planning and preparation, and his inadequate visual lookout, which resulted in a collision with a television tower.

Findings

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

Findings

1. OBJECT - TOWER

2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. (C) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND

Factual Information

HISTORY OF FLIGHT

On September 11, 2004 at 0528 eastern daylight time a Piper PA-23-250, N962AB, registered to and operated by Vector Disease Control Inc., and flown by the commercial pilot collided with a 520-foot television tower in Lake Wales, Florida. The aerial application flight was operated under the Provisions of Title 14, CFR Part 137, and visual flight rules. Night visual meteorological condition prevailed and no flight plan was filed. The pilot and pilot rated passenger received fatal injuries and the airplane sustained substantial damage. The flight originated from Lake Wales Municipal Airport in Lake Wales, Florida, September 11, 2004, at 0415.

According to the operator, the airplane was Mosquito Control Spraying under contract with the state of Florida. Witnesses in the area stated that they heard the airplane and could see its marker lights. One witness stated that at 0500 she went outside her home because it was hot and the power was out. She could hear the generator for the tower, but there were no obstruction lights illuminated. She heard the airplane's engines running and saw the airplane hit the tower and falling quickly. She stated the airplane sounded like a helicopter and after striking the tower the engine noise quite. She knew the airplane went into the orange groves and called for assistance. Another witness stated that he saw the airplane headed north then saw a ball of smoke and knew it hit the tower. He stated that he could only see the lights on the airplane but not the tower. He further stated that the airplane was low and the sound of the airplane stopped as soon as it hit the tower. The Polk County Sheriff's Department, confirmed that there was an automobile accident at about 0330 and that the accident had knocked out power in the area surrounding and including the television tower.

PERSONNEL INFORMATION

A review of information on file with the Federal Aviation Administration Airman's Certification Division, Oklahoma City, Oklahoma, revealed the pilot was issued a commercial pilot certificate with ratings for airplane single engine land, airplane multiengine land and instrument airplane. A review of records on file with the FAA Aero Medical Records revealed the pilot held a second class medical certificate issued on January 27, 2004, with a restriction that he must wear corrective lenses. The pilot reported on his application for the medical certificate that he had accumulated 15,500 total flight hours.

AIRCRAFT INFORMATION

A review of maintenance records revealed that the annual inspection was completed on June 1, 2004, at a tachometer time of 7,115.0 hours. At the time of the accident the airplane had

operated 134 hours since the Annual Inspection.

METEOROLOGICAL INFORMATION

The nearest weather reporting facility at the time of the accident was Orlando, Florida. The 0553 surface weather observation was: sky clear, visibility 10 statute miles, temperature 77-degrees Fahrenheit, dew point temperature 77-degrees Fahrenheit, wind 050-degrees at five knots, and altimeter 30.10. Visual meteorological conditions prevailed at the time of the accident. According to the Saint Petersburg, Florida Automated Flight Service Station, the pilot did not contact them for a weather briefing prior to the accident flight. According to records provided by Comcast Cable Television, a Notice to Airman (NOTAM) was issued by Comcast on August 13, 2004, with an extended date to November 23, 2004, stating that the power and lights had failed on the Tower in Lake Wales, Florida. According to Comcast the NOTAM was issued covering the above time span due to potential Hurricane activity in the local area. Additionally, Comcast provided documentation from Tower Sentry Inc., a company contracted by Comcast to provide continuous monitoring of the tower lights. The documentation indicated that on September 11, 2004 at 0336 the tower lights were off. The time reflected by the tower monitoring company coincided with the time of an automobile accident reported by the Polk County Sheriff's Department which caused a power failure in the local area.

WRECKAGE AND IMPACT INFORMATION

Examination of the wreckage site found that the airplane had collided with the tower about 20-feet below the top and the airplane's debris was found scattered at the base of the television tower in a westerly direction. The left wing was found separated from the airframe five feet outboard of the wing root. Multiple sections of the left wing and fuel tanks were scattered in the general area of the tower. The tower light was located just south at the bottom of the tower. The main wreckage was located about a quarter mile due north of the tower. The airplane collided with the ground in nose down attitude and torque to the east. The cockpit and fuselage came to rest on its left side. The right wing remained intact but crumpled. The vertical and horizontal stabilizers came to rest directly behind the cockpit in an east-west direction. The left engine was located about 200 yards to the left of the main wreckage. The right engine remained attached to the right wing.

Visual examination of the tower light bulb element found it broken.

MEDICAL AND PATHOLOGICAL INFORMATION

The District Ten Medical Examiner for the State of Florida, conducted a postmortem examination of the pilot on September 12, 2004. The reported cause of death was "blunt force trauma." The Forensic Toxicology Research Section, Federal Aviation Administration, Oklahoma City, Oklahoma performed postmortem toxicology of specimens from the pilot. Carbon Monoxide and Cyanide tests were not performed. No ethanol was detected in the liver or muscle. Verapamil, Metoprolol, Ephedrin and Pseudoephedrin was detected in the liver and

the Kidney. The pilot did report on his last application for a second class medical certificate the he was using 100 mg Toporol daily and 12.5 mg Microzide daily.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	55, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
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:	Yes
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	January 1, 2004
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 1, 2003
Flight Time:	15500 hours (Total, all aircraft), 2500 hours (Total, this make and model), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N962AB
Model/Series:	PA-23-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility; Restricted (Special)	Serial Number:	27-3869
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	August 1, 2004 Annual	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:	19 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	7331 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540-C4B5
Registered Owner:	Vector Disease Control Inc.	Rated Power:	250 Horsepower
Operator:		Operating Certificate(s) Held:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	ORL,113 ft msl	Distance from Accident Site:	40 Nautical Miles
Observation Time:	05:53 Local	Direction from Accident Site:	158°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	25°C / 25°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lake Wales Mun, FL (X07)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	04:15 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	27.899723,-81.622779

Administrative Information

Investigator In Charge (IIC):	Wilson, Ralph
Additional Participating Persons:	Susan Dillon; Federal Aviation Administration; Orlando, FL
Original Publish Date:	October 27, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=60136

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](#).