



Aviation Investigation Final Report

Location:	Abilene, Kansas	Accident Number:	CHI02LA219
Date & Time:	July 29, 2002, 15:30 Local	Registration:	N90TC
Aircraft:	Piper PA-30	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane collided with trees and wires shortly after takeoff from runway 35, 4,100 feet long. According to the pilot he originally departed the airport on runway 17, then returned due to an unlatched door. The landing was made on runway 35. After touching down, the pilot stopped the airplane on the runway and relatched the door. He then continued the takeoff from where he had stopped on the runway. The takeoff was made to the north with approximately 3,000 feet of runway remaining. The pilot stated the airplane became airborne with approximately 1,000 feet of runway remaining. The pilot reported that he retracted the gear right after takeoff and he stayed in ground effect trying to gain airspeed. The airplane contacted trees and wires which were located about 250 yards off the departure end of the runway. The wires that there contacted were approximately 14 feet above the ground. Another set of wires above those contacted were at a height of about 20 feet above the ground. The higher wires were not damaged. The pilot reported that he was aware of the wires. One witness reported the airplane became airborne approximately 30 feet before the end of the runway. The closest weather reporting station, 21 miles west of the accident site, reported wind from 220 degrees at 10 knots. This observation was taken 23 minutes after the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot failed to achieve clearance over the trees and wires. Factors associated with the accident were the pilot failed to use all available runway, a downwind takeoff was performed, the tailwind, trees, and wires.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) WEATHER CONDITION - TAILWIND
2. (F) WRONG RUNWAY - USED - PILOT IN COMMAND
3. (F) ALL AVAILABLE RUNWAY - NOT USED - PILOT IN COMMAND
4. (C) CLEARANCE - NOT ATTAINED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. (F) OBJECT - TREE(S)
6. (F) OBJECT - WIRE, TRANSMISSION

Factual Information

On July 29, 2002, at 1530 central daylight time, a Piper PA-30, N90TC, was substantially damaged when it collided with trees and wires shortly after takeoff from runway 35 (4,100 feet by 75 feet, dry asphalt) at the Abilene Municipal Airport, Abilene, Kansas. The pilot was not injured. The Title 14 CFR Part 91 flight was operating in visual meteorological conditions without a flight plan. The flight was departing at the time of the accident and the intended destination was Hartington, Nebraska.

The pilot reported that he departed the airport on runway 17 with calm winds. He reported that while climbing out, his door became unlatched. He made a 180 degree turn back to the airport where he landed on runway 35. The pilot stated the winds had switched "to north" at this time. After touching down, he stopped the airplane on the runway and relatched the door. The pilot then continued the takeoff from where he had stopped on the runway. The takeoff was made to the north with approximately 3,000 feet of runway remaining. The pilot stated the airplane became airborne with approximately 1,000 feet of runway remaining. The pilot reported that he retracted the gear right after takeoff and he stayed in ground effect trying to gain airspeed. The airplane contacted trees and wires which were located about 250 yards off the departure end of the runway. The wires that there contacted were approximately 14 feet above the ground. Another set of wires above those contacted were at a height of about 20 feet above the ground. The higher wires were not damaged. The pilot reported that he was aware of the wires and he pulled the power off prior to contacting the wires.

A witness to the accident reported hearing the airplane engines operating normally during the takeoff. He reported the airplane did not appear to be moving very fast on the runway and it became airborne about 30 feet prior to the end of the runway. The witness reported the airplane did not appear to be moving fast after it lifted off and that it "stayed low with a very gradual climb and then dipped momentarily before climbing again." He stated he heard tree limbs breaking, the engine sounds quit, then he heard the impact.

The closest weather reporting station was at Salina, Kansas, located approximately 21 nautical miles west of Abilene. The Salina weather reported at 1553 indicated with winds were from 220 degrees at 10 knots. Calculated density altitude at the time of the accident was approximately 3,780 feet.

Pilot Information

Certificate:	Commercial; Private	Age:	54, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	June 12, 2002
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	May 14, 2001
Flight Time:	8174 hours (Total, all aircraft), 750 hours (Total, this make and model), 95 hours (Last 90 days, all aircraft), 38 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N90TC
Model/Series:	PA-30	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	30-147
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	January 31, 2002 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	158 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	6332 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-320-B1A
Registered Owner:	Stout & Deines, Inc.	Rated Power:	160 Horsepower
Operator:	Kenneth E. Stout	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SLN,1273 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	15:53 Local	Direction from Accident Site:	250°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	35°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Abilene, KS (K78)	Type of Flight Plan Filed:	None
Destination:	Hartington, NE (0B4)	Type of Clearance:	None
Departure Time:	15:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Abilene Municipal K78	Runway Surface Type:	Asphalt
Airport Elevation:	1152 ft msl	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	4100 ft / 75 ft	VFR Approach/Landing:	None

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:	38.903888,-97.235832

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pam
Additional Participating Persons:	Kevin Alexander; FAA- Wichita FSDO; Wichita, KS
Original Publish Date:	April 23, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=55330

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