		NTSB ID: FTW01FA129A		Aircraft Registration Number: N5617E	
		Occurrence Date: 05/26/2001		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Pryor	State OK	Zip Code 74361	Local Time 1350	Time Zone CDT	
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer Cessna		Model/Series 150		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>HISTORY OF FLIGHT</p> <p>On May 26, 2001, at approximately 1350 central daylight time, a Cessna 150, N5617E, was destroyed when it impacted terrain during the takeoff initial climb while towing a Schleicher Ka-6E glider, N9915X, at the Mid-America Industrial Airport, Pryor, Oklahoma. The glider did not sustain any damage. The private pilot flying the airplane sustained fatal injuries, and the private pilot flying the glider received minor injuries. The airplane was registered to and operated by Tulsa Skyhawks, Inc., Bixby, Oklahoma. The glider was owned and operated by its pilot. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 tow flight. The local flight was originating at the time of the accident.</p> <p>The glider pilot stated in an interview with the NTSB investigator-in-charge (IIC), that at the time of the takeoff roll, the wind was out of the west, approximately 15 knots with gusts. He stated that he maintained a crab of 15 degrees into the wind in order to track down the runway 17 centerline. Shortly after lift-off, the glider encountered "severe turbulence" and was caught in an "extreme updraft." He recalled looking up at the sky, losing sight of the tow airplane, and being "jarred about the cockpit" while attempting to disengage the towrope. He further recalled that his altimeter was indicating 440 feet agl approximately midway down the runway at the time he released the towrope, and he estimated the tow airplane was 150 feet lower than his glider. He stated that "much of [the] runway was still ahead even though the glider had reached near pattern altitude already". While on downwind, he noticed some smoke at the end of the runway. He completed a normal traffic pattern and landed on the runway. Upon landing, he realized that the tow airplane had impacted the ground and was engulfed in flames on the east side of the runway.</p> <p>The glider pilot mentioned that his glider had a tendency for the trim lever to release from its "full nose down" trim position, which is the recommended takeoff trim lever position, and "snatch" back to the "full nose up" position. He remembered having to push forward during the initial climb to counteract a nose up effect.</p> <p>Witnesses were interviewed by the NTSB investigator-in-charge and by the FAA aviation safety inspector. One eye witness, who was located at the approach end of runway 17, stated that the glider was drifting to the left of the centerline and out of position. He observed the glider gain altitude "relatively abrupt" and was able to detect that the glider was "decidedly higher" than the tow airplane. He saw the glider break away to the east and thought the problem was over. He continued to observe the tow airplane and stated that from his position the airplane appeared to level off momentarily, and then "nose dived and impacted the ground."</p> <p>PERSONNEL INFORMATION</p> <p>The 44-year-old private pilot of the tow airplane held airplane single-engine land, airplane</p>					
FACTUAL REPORT - AVIATION					

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Narrative (Continued)

instrument, and glider ratings. The pilot was issued a third class medical certificate on May 19, 1999, with no limitations or restrictions. The pilot had accumulated approximately 583 total flight hours, of which 537 hours were in single-engine airplanes and 45 hours were in gliders. He had accumulated approximately 8.3 hours in the previous 30 days, of which 3.5 hours were in the same make and model as the accident airplane. The pilot completed his last biennial flight review on May 29, 1999, in a Grob 103 glider.

The 79-year-old private pilot/owner of the glider held airplane single-engine land and glider ratings. He held a valid third class medical certificate that was issued on December 9, 1999. The only limitation to the medical certificate was that the pilot was to wear corrective lenses while exercising the privileges of his airman certificate.

A review of the glider pilot's flight logbooks revealed that on April 9, 1999, he completed a biennial flight review in a Blanik L-23 glider. The logbooks also revealed that as of May 1, 2001, he had logged a total flight time of 971.8 hours, of which 299.5 hours were in airplanes and 672.3 hours were in gliders. The last three entries in the pilot's glider logbook were 3 hours 10 minutes on September 2, 2000, 20 minutes on February 3, 2001, and 25 minutes on May 19, 2001. The last two entries in the pilot's airplane logbook were 25 minutes on February 3, 2000, and 50 minutes on May 9, 2001.

AIRCRAFT INFORMATION

The 1959-model Cessna 150 was a high wing, single-engine, two-place airplane, which had been modified with a Horton STOL kit, a tow hook, and a Lycoming O-320 engine rated at 150 horsepower. The airplane underwent its last annual inspection on February 2, 2001, at an aircraft total time of approximately 3,996.0 hours. At the time of the accident, the airplane had accumulated approximately 4,016.0 total flight hours.

The 1967-model Schleicher Ka-6E had a wood structure with a wingspan of 49.2 feet. The wing area was 133.5 square feet with an aspect ratio of 18.1. The aircraft's empty weight was 419 pounds and its maximum gross weight was 661 pounds. Examination of the aircraft's maintenance records revealed that the glider underwent its last annual inspection on March 24, 2001, at an aircraft total time of 1,165 hours and 16 minutes. At the time of the accident, the glider had accumulated 1,165 hours and 41 minutes. No evidence of uncorrected maintenance discrepancies was noted in the records.

A functional check of the glider's trim lever operation was completed by the NTSB investigator-in-charge. The trim lever was placed in the full nose down position (takeoff position) and then secured by hand-tightening the wing nut, which is used to lock the lever in place. The control stick was then pulled aft, and the trim lever would release almost immediately.

This procedure was repeated several times with the same result. An FAA inspector also performed a functional check of the trim lever operation with the same results.

According to the US sales representative for Schleicher gliders, the trim system in the glider was "not highly effective and should have been easy to override."

METEOROLOGICAL INFORMATION

At 1351, the weather observation facility at the Claremore Regional Airport, Claremore, Oklahoma (located 9 miles west of the accident site), reported the wind from 250 degrees at 11 knots gusting to 15 knots, visibility 10 statute miles, sky clear, temperature 73 degrees Fahrenheit, dew point 48 degrees Fahrenheit, and an altimeter setting of 29.94 inches of mercury.

A pilot, whose tow flight departed just prior to the accident, reported that the weather conditions were partly cloudy with a "reasonably" steady wind from about 240 degrees at approximately 9 knots,

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Narrative (Continued)

and the temperature was about 73 degrees Fahrenheit. The pilot further reported that he did not experience any turbulence or gusty wind conditions.

AERODROME INFORMATION

The Mid-America Industrial Airport is located 4 miles south of Pryor, at an elevation of 622 feet. The airport has one asphalt runway, 17/35, which is 5,000 feet long and 75 feet wide.

WRECKAGE IMPACT INFORMATION

The airplane impacted the 75-foot wide runway 16 feet 5 inches from the east edge. The initial impact point was located using a global positioning satellite (GPS) receiver at 36 degrees 13 minutes 13.4 seconds north latitude and 95 degrees 18 minutes 47.9 seconds west longitude. Examination of the accident site revealed that the airplane impacted the ground on a measured magnetic heading of 160 degrees and came to rest upright off the east side of the runway 174 feet from the initial ground scar on a measured magnetic heading of 155 degrees. The airplane's cockpit/cabin area was consumed by fire. Flight control continuity was confirmed from all flight control surfaces through the fuselage to their respective cockpit controls. All landing gear were found separated.

The tow hook was found partially separated from the tail, and the 187-foot tow rope was found 130 feet 8 inches northwest of the tail of the airplane. Examination of the tow rope revealed that the breakable link was broken. (The breakable link is part of a 6-foot adapter section of the tow rope that is attached to the glider end of the tow rope.) The pilot's emergency release rope was still attached to the tow hook and it was found laying on the ground next to the airplane.

The engine remained partially attached to the airframe. Engine crankshaft continuity and cylinder compression were obtained. Both magnetos and their wire harnesses were fire damaged, and all spark plug electrodes were light gray in color. The propeller remained attached to the crankshaft. One propeller blade had leading edge gouging and exhibited twisting and aft bending. The other blade had leading edge gouging and its tip was bent aft.

No damage was noted during an examination of the glider by the NTSB IIC. The 6-foot adapter section of the tow rope was not found during the on scene investigation; however, it was later found by a member of the soaring club.


MEDICAL AND PATHOLOGICAL INFORMATION


The Office of the Medical Examiner at Oklahoma City, Oklahoma, performed an autopsy of the tow airplane pilot. There was no evidence found of any preexisting disease that could have contributed to the accident.


The FAA Civil Aeromedical Institute toxicology report noted 47.6657(mg/dl, mg/hg) salicylate was detected in urine. Atenolol was detected in blood, liver, and urine. According to the FAA Southwest Regional Flight Surgeon, atenolol is an anti-hypertensive medication, and it was reported on the airman's last physical examination.


ADDITIONAL INFORMATION

The wreckage of the Cessna 150 was released to the owner on May 27, 2001.

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Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
Mid-America Industrial	H71	622 Ft. MSL	17	5000	75
Runway Surface Type: Asphalt					
Runway Surface Condition: Dry					
Type Instrument Approach: NONE					
VFR Approach/Landing: None					
Aircraft Information					
Aircraft Manufacturer	Model/Series		Serial Number		
Cessna	150		17117		
Airworthiness Certificate(s): Normal					
Landing Gear Type: Tricycle					
Homebuilt Aircraft? No	Number of Seats: 2	Certified Max Gross Wt.	1500 LBS	Number of Engines: 1	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Reciprocating	Lycoming	O-320	150 HP		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time		
Annual	03/2001	20 Hours	4016 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes	ELT Operated?	ELT Aided in Locating Accident Site? No			
Owner/Operator Information					
Registered Aircraft Owner	Street Address				
Tulsa Skyhawks, Inc.	8383 E 114TH ST S				
	City	State	Zip Code		
	Bixby	OK	74008		
Operator of Aircraft	Street Address				
Same as Reg'd Aircraft Owner	Same as Reg'd Aircraft Owner				
	City	State	Zip Code		
Operator Does Business As:			Operator Designator Code:		
- Type of U.S. Certificate(s) Held: None					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Other Work Use					
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First Pilot Information																																																																																				
Name		City		State	Date of Birth																																																																															
On File		On File		On File	On File																																																																															
					Age																																																																															
					44																																																																															
Sex: M	Seat Occupied: Left	Principal Profession: Unknown		Certificate Number: On File																																																																																
Certificate(s): Private																																																																																				
Airplane Rating(s): Single-engine Land																																																																																				
Rotorcraft/Glider/LTA: Glider																																																																																				
Instrument Rating(s): Airplane																																																																																				
Instructor Rating(s): None																																																																																				
Type Rating/Endorsement for Accident/Incident Aircraft?				Current Biennial Flight Review? 05/1999																																																																																
Medical Cert.: Class 3		Medical Cert. Status: Valid Medical--no waivers/lim.		Date of Last Medical Exam: 05/1999																																																																																
<table border="1"> <tr> <th rowspan="2">- Flight Time Matrix</th> <th rowspan="2">All A/C</th> <th rowspan="2">This Make and Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multi-Engine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> <tr> <td>Total Time</td> <td>583</td> <td></td> <td>537</td> <td>1</td> <td></td> <td>36</td> <td>64</td> <td></td> <td>45</td> <td></td> </tr> <tr> <td>Pilot In Command(PIC)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Instructor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td>8</td> <td>4</td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td>8</td> <td>4</td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td>8</td> <td>4</td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air	Actual	Simulated	Total Time	583		537	1		36	64		45		Pilot In Command(PIC)											Instructor											Last 90 Days	8	4	8								Last 30 Days	8	4	8								Last 24 Hours	8	4	8							
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Seatbelt Used? Yes		Shoulder Harness Used? Yes		Toxicology Performed? Yes																																																																																
				Second Pilot? No																																																																																
Flight Plan/Itinerary																																																																																				
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Departure Point		State	Airport Identifier	Departure Time	Time Zone																																																																															
Same as Accident/Incident Location			H71H	1350	CDT																																																																															
Destination		State	Airport Identifier																																																																																	
Local Flight			H71																																																																																	
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Method of Briefing: Unknown																																																																																				

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		Occurrence Type: Accident			
Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
GCM	1351	CDT	725 Ft. MSL	290 NM	9 Deg. Mag.
Sky/Lowest Cloud Condition: Clear				Ft. AGL	Condition of Light: Day
Lowest Ceiling: None			Ft. AGL	Visibility: 10 SM	Altimeter: 29.94 "Hg
Temperature: 23 °C	Dew Point: 9 °C	Wind Direction: 250		Density Altitude: Ft.	
Wind Speed: 11	Gusts: 15	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): Ft.	Visibility (RVV) SM	Intensity of Precipitation:			
Restrictions to Visibility: None					
Type of Precipitation: None					
Accident Information					
Aircraft Damage: Destroyed		Aircraft Fire: Ground		Aircraft Explosion: None	
Classification: U.S. Registered/U.S. Soil					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -	1				1
Other Ground					
- GRAND TOTAL -	1				1
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	Occurrence Type: Accident	
Administrative Information		
<p>Investigator-In-Charge (IIC) Douglas D. Wigington</p>		
<p>Additional Persons Participating in This Accident/Incident Investigation:</p> <p>Arturo Hernandez Aviation Safety Inspector (Operations) FAA FSDO Oklahoma City, OK 73108</p> <p>Robert S August Air Safety Investigator Cessna Aircraft Company Wichita, KS 67277</p> <p>John B Butler Air Safety Investigator Lycoming Williamsport, PA 17701</p>		
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