



Aviation Investigation Final Report

Location:	Bonham, Texas	Accident Number:	DFW07LA183
Date & Time:	August 15, 2007, 07:00 Local	Registration:	N557SX
Aircraft:	Huggles Sonex	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The sport pilot departed in his single-engine experimental airplane for a local flight. Shortly after takeoff, a witness observed the airplane make a sharp (hard) right turn and nose dive straight into the ground. Another witness said the airplane departed with full power at a good rate of climb and speed, followed shortly after by the sound of "normal" power reduction. The airplane came to rest in a field adjacent to the runway and was destroyed by post-impact fire. The pilot purchased the airplane approximately four months prior to the accident and had logged approximately 22 hours in the airplane, which had accrued a total of 50 hours. An invoice dated a month prior indicated that the pilot had purchased wing skin and rivets for the left wing. However, it could not be determined if any work had been done to the left wing prior to the accident because the maintenance logbooks were not made available for review. Toxicological testing was conducted by the FAA Toxicology Accident Research Laboratory, in Oklahoma City, Oklahoma. The report of testing noted negative results for carbon monoxide, cyanide, ethanol, and drugs. The report noted 6200 mg/dl of glucose in urine, 0 mg/dl of glucose in vitreous fluid, and 9 percent Hemoglobin A1C. According to the toxicological report, "Elevated postmortem urine glucose levels could be caused by diabetes mellitus or several other medical conditions, which may or may not have been a factor in the accident." The FAA had no record of application for airman medical certificate for the pilot since 1992. No medical certificate is required for operation under sport pilot regulations.

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 control of the airplane on take off, which resulted in an inadvertent stall and subsequent collision with terrain.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

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

2. (C) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - GROUND

Factual Information

On August 15, 2007, at 0700 central daylight time, a single-engine Ruggles Sonex experimental airplane, N557SX, was substantially damaged when it collided with terrain following a loss of control shortly after take off from the Jones Field Airport (F00), near Bonham, Texas. The private pilot, who was also the registered owner and the sole occupant of the airplane, was fatally injured. Visual meteorological conditions prevailed and no flight plan was filed for the personal flight conducted under 14 Code of Federal Regulations Part 91. The local flight was originating at the time of the accident.

A witness reported that he observed the airplane take off and begin to climb. Shortly after, he observed "...the plane take a sharp (hard) right and do a nose-dive straight to the ground." When the airplane collided with the ground, there was a loud "boom" followed by smoke and fire.

A second witness also observed the airplane take off and climb out at "...what appeared to be full power...and at what appeared to be a good rate of climb and speed." He then heard what sounded like a "normal" power reduction. The witness did not see the airplane impact the terrain and was not aware the airplane had crashed until he heard the sound of emergency vehicles.

A Federal Aviation Administration (FAA) inspector performed an on-scene examination of the wreckage of the airplane. According to the inspector, the airplane came to rest in a grassy area adjacent to Runway 35. The cockpit and fuselage sustained extensive post impact fire damage. However, the tail section was relatively undamaged and no mechanical deficiencies were noted. The pilot was reported to have purchased the airplane during April 2007, and had recently purchased wing skin and rivets for the airplane's left wing. The aircraft maintenance logbooks were not made available for review and it could not be determined if any maintenance had been performed to the airplane's left wing prior to the accident. The airplane had accrued a total of approximately 50 hours at the time of the accident.

The pilot was issued a Sport Pilot certificate on March 14, 2007. A review of his logbook revealed that he only logged flight time in the accident airplane, which was approximately 22 hours. The pilot's total flight time was unknown.

An autopsy was performed on the pilot on August 15, 2007, by the Southwestern Institute of Forensic Sciences, in Dallas, Texas. According to the report, the cause of death was "multiple blunt force injuries."

Toxicological testing was conducted by the FAA Toxicology Accident Research Laboratory, in Oklahoma City, Oklahoma. The test revealed negative results for carbon monoxide, cyanide,

ethanol, and drugs. However, 6200 mg/dl of Glucose was detected in the urine, 0 mg/dl of Glucose was detected in vitreous fluid, and 9 percent of Hemoglobin A1C was detected in the blood. According to the toxicological report, "Elevated postmortem urine glucose levels could be caused by diabetes mellitus or several other medical conditions, which may or may not have been a factor in the accident." According to the FAA's Regional Flight Surgeon, an elevated A1C Hemoglobin above 6 percent is considered abnormal. If the medical condition had been reported to the FAA, they "...would have reviewed the case for consideration of a special issuance for diabetes."

Weather at the Eaker Airport (DUA), near Durant, Oklahoma, about 23 miles northwest of the accident site, at 0755, was reported as calm wind, visibility 7 miles, broken clouds 6,500 feet, temperature 81 degrees Fahrenheit, dewpoint 77 degrees Fahrenheit, and a barometric pressure setting of 29.95 inches of Mercury.

Pilot Information

Certificate:	Sport Pilot	Age:	61, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	None None	Last FAA Medical Exam:	February 1, 1992
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	22 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Huggles	Registration:	N557SX
Model/Series:	Sonex	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	0557
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1100 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Jabiru
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	Ronnie D. Wren	Rated Power:	120 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	DUA,698 ft msl	Distance from Accident Site:	23 Nautical Miles
Observation Time:	07:55 Local	Direction from Accident Site:	330°
Lowest Cloud Condition:		Visibility	7 miles
Lowest Ceiling:	Broken / 6500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/ None	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	27°C / 25°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bonham, TX (F00)	Type of Flight Plan Filed:	None
Destination:	(F00)	Type of Clearance:	None
Departure Time:	07:00 Local	Type of Airspace:	

Airport Information

Airport:	Jones Field Airport F00	Runway Surface Type:	Asphalt
Airport Elevation:	618 ft msl	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	4000 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	33.607776,-96.174163

Administrative Information

Investigator In Charge (IIC): Yeager, Leah

Additional Participating Persons: Oscar Thomas; FAA/FSDO; Dallas, TX

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Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=66441>

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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](#).