



National Transportation Safety Board Aviation Accident Factual Report

Location:	La Belle, MO	Accident Number:	CHI08LA031
Date & Time:	11/01/2007, 1635 CDT	Registration:	N634WB
Aircraft:	WRB Associates, LLC. Zodiac 601 XL	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Flight Test		

HISTORY OF FLIGHT

On November 1, 2007, at 1635 central daylight time, a WRB Associates Zodiac 601 XL airplane, N634WB, was destroyed during an in-flight collision with terrain and subsequent fire/explosion near La Belle, Missouri. Visual meteorological conditions prevailed at the time of the accident. The flight was operating under the provisions of 14 Code of Federal Regulations (CFR) Part 91 without a flight plan. The pilot, the sole occupant, was fatally injured. The local flight departed Sharpe Farms Airport (MO09) near Lewistown, Missouri, at 1630.

Several witnesses reported seeing the airplane depart and then commence a series of left turns about two miles southeast of the airport. While the airplane was established in a left turn it rolled to the left and entered a near vertical descent. The airplane exploded upon impact and a ground fire ensued.

PERSONNEL INFORMATION

According to Federal Aviation Administration (FAA) records, the pilot of N634WB, age 71, held a private pilot certificate with an airplane single-engine land rating. He was not instrument rated. The pilot's last aviation medical examination was completed on August 4, 1994, when he was issued a third-class medical certificate with no limitations or restrictions.

The pilot's flight logbook indicated that he had accumulated 119.2 hours total flight time, of which 80.7 hours were as pilot-in-command. He had accumulated 3.5 hours at night and 3.6 hours in simulated instrument conditions. The pilot did not have any flight experience in a model 601 XL airplane before the accident flight. The pilot's most current flight review, as required by 14 CFR Part 61.56, was completed on September 1, 1991. The last documented flight was completed on September 1, 1998, for a conventional landing gear orientation flight with a flight instructor. According to the pilot's wife, it had been nearly 10 years since he last piloted an aircraft.

AIRCRAFT INFORMATION

The accident airplane was an amateur-built WRB Associates Zodiac 601 XL, serial number 6-6358. The all-metal airplane incorporated a low-wing design with a fixed tricycle landing gear. The airplane had a maximum gross weight of 1,320 pounds and could accommodate two occupants. A Jabiru model 3300A reciprocating engine, serial number 33A1283, powered the airplane. The 120-horsepower engine provided power through a Sensenich W64ZK-49, fixed-pitch, two-blade, wood propeller.

Four days prior to the accident, the airplane was issued a Special Airworthiness Certificate under the provisions of 14 CFR Part 21.191(i) as an Experimental Light Sport Aircraft (E-LSA). The accident occurred during the airplane's first flight since manufacture.

A review of the airframe, engine and propeller records found no history of unresolved airworthiness issues.

METEOROLOGICAL INFORMATION

The closest weather station to the accident site was at Quincy Regional Airport (KUIIN), Quincy, Illinois, located about 32 nautical miles east of the accident site. The airport was equipped with an automated surface observing system (ASOS).

At 1654, the KUIIN ASOS reported the following weather conditions: Wind 150 degrees true at 5 knots; visibility 10 miles; sky clear; temperature 13 degrees Celsius; dew point -6 degrees Celsius; altimeter setting 30.24 inches of mercury.

WRECKAGE AND IMPACT INFORMATION

The wreckage was found in a vacant field with no obstructions in the general area of the accident site. The absence of any discernible lateral ground markings was consistent with a near vertical impact. The main wreckage consisted of the entire airframe. The fuselage and main cabin were destroyed by fire. The only discernible cabin components were of steel construction. The instrument panel and its associated components exhibited fire and impact damage. Both wings were damaged by impact and fire. All flight control surfaces were accounted for at the accident site. The ailerons and flaps were located in their appropriate positions. The flaps were in a fully retracted position. The aileron and elevator control cables were continuous from their respective control surfaces to the cockpit control columns. The rudder control cables were continuous from the control surface horn to the forward cockpit area. The main landing gear assembly was separated from the fuselage. The nose landing gear was impacted into the engine compartment. The engine remained partially attached to the airframe. The entire engine assembly exhibited thermal damage. Both propeller blades were highly fragmented and portions were found as far as 30 feet from the main wreckage.

Examination of the recovered wreckage revealed no evidence of a pre-impact mechanical

malfunction.

MEDICAL AND PATHOLOGICAL INFORMATION

On November 3, 2007, an autopsy was performed on the pilot at the Boone/Callaway County Medical Examiner's Office, Columbia, Missouri. The cause of death was listed as multiple blunt force injuries due to aircraft accident.

The FAA's Civil Aeromedical Institute (CAMI) in Oklahoma City, Oklahoma, performed toxicology tests on the pilot. According to CAMI's report, the specimens were received in a state of putrefaction. No ethanol was detected in liver and muscle samples. Metoprolol and Amlodipine were present in liver and kidney samples. Quinine was detected in liver samples. The pilot had been prescribed Metoprolol and Amlodipine for the treatment of hypertension. Quinine is found in tonic water and in over-the-counter nutritional supplements.

Pilot Information

Certificate:	Private	Age:	71, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Sport Pilot None	Last FAA Medical Exam:	08/04/1994
Occupational Pilot:	No	Last Flight Review or Equivalent:	09/01/1991
Flight Time:	119 hours (Total, all aircraft), 81 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	WRB Associates, LLC.	Registration:	N634WB
Model/Series:	Zodiac 601 XL	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Experimental Light Sport	Serial Number:	6-6358
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	10/28/2007, Condition	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	as of last inspection	Engine Manufacturer:	Jabiru
ELT:	Installed	Engine Model/Series:	3300A
Registered Owner:	WRB Associates, LLC.	Rated Power:	120 hp
Operator:	Stevens Lee Walker	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KUIN, 768 ft msl	Distance from Accident Site:	32 Nautical Miles
Observation Time:	1654 CDT	Direction from Accident Site:	100°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.24 inches Hg	Temperature/Dew Point:	13° C / -6° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lewistown, MO (MO09)	Type of Flight Plan Filed:	None
Destination:	Lewistown, MO (MO09)	Type of Clearance:	None
Departure Time:	1630 CDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	1 Fatal	Latitude, Longitude:	40.023611, -91.873889

Administrative Information

Investigator In Charge (IIC):	Andrew T Fox
Additional Participating Persons:	Raymond J Callahan; Federal Aviation Administration - St. Louis FSDO; St. Louis, MO
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .