



National Transportation Safety Board Aviation Accident Data Summary

Location:	Laddonia, MO	Accident Number:	CEN17FA288
Date & Time:	07/27/2017, 0452 CDT	Registration:	N701XL
Aircraft:	ZENITH CH701SP	Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

Although he had no night or instrument flight experience, the sport pilot departed in a non-instrument-certificated light sport airplane at night with an overcast ceiling and thunderstorms in the area. Radar data showed that the airplane proceeded on course for about 9 minutes and then entered a right descending turn that continued to ground impact, which was consistent with the pilot attempting to return to the departure airport and not paying attention to his altitude. Examination of the accident site revealed that the airplane struck open level farm land in a right wing-low, nose-low attitude. Examination of the engine and airframe did not reveal any evidence of preimpact anomalies that would have precluded normal operation. It is likely that the pilot continued visual flight into an area of instrument meteorological conditions, which resulted in the pilot experiencing a loss of visual reference and subsequent spatial disorientation.

The pilot had a history of chronic insomnia treated with temazepam, a sedating benzodiazepine, and was regularly prescribed hydrocodone, an opioid analgesic. Toxicology testing detected these drugs and their metabolites in the pilot's system. The pilot was likely impaired by effects from his use of temazepam, and the impairing effects of temazepam were likely enhanced by the pilot's use of hydrocodone. It is likely that the pilot's decision-making was degraded due to his combined use of temazepam and hydrocodone.

Flight Events

Enroute - VFR encounter with IMC
Maneuvering-low-alt flying - Collision with terr/obj (non-CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's decision to take off at night and continue visual flight into instrument meteorological conditions, which resulted in the pilot becoming spatially disoriented and losing control of the airplane. Contributing to the accident were the pilot's degraded decision-making due to his use of a combination of impairing prescription drugs, and the pilot's lack of instrument and night flight experience.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-(general)-Not attained/maintained - C

Aircraft-Aircraft oper/perf/capability-Aircraft capability-Instrument flight capability-Incorrect use/operation

Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - C

Personnel issues-Psychological-Perception/orientation/illusion-Spatial disorientation-Pilot - C

Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C

Personnel issues-Physical-Impairment/incapacitation-Prescription medication-Pilot - F

Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot - F

Personnel issues-Experience/knowledge-Experience/qualifications-Qualification/certification-Pilot - F

Personnel issues-Experience/knowledge-Experience/qualifications-Total instrument experience-Pilot - F

Environmental issues-Conditions/weather/phenomena-Ceiling/visibility/precip-Below VFR minima-Contributed to outcome - C

Environmental issues-Task environment-Pressures/demands-Personal pressure-Contributed to outcome

Pilot Information

Certificate:	Sport Pilot	Age:	41
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	Powered-Lift	Instructor Rating(s):	None
Flight Time:	272 hours (Total, all aircraft), 98 hours (Total, this make and model), 31 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ZENITH	Registration:	N701XL
Model/Series:	CH701SP	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	Rotax
Operating Certificate(s) Held:	None	Engine Model/Series:	912ULS
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night
Observation Facility, Elevation:	KMYJ	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 1100 ft agl	Wind Speed/Gusts, Direction:	5 knots / , 230°
Temperature:	22° C	Visibility	1.5 Miles
Precipitation and Obscuration:			
Departure Point:	Mexico, MO (KMYJ)	Destination:	Oshkosh, WI (KOSH)

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	39.334444, -91.685833		

Administrative Information

Investigator In Charge (IIC):	Arnold W Scott	Adopted Date:	10/10/2018
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=95688		

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