



National Transportation Safety Board Aviation Accident Final Report

Location:	Gastonia, NC	Accident Number:	GAA20CA027
Date & Time:	10/11/2019, 1220 EDT	Registration:	N235JH
Aircraft:	ZENITH ZENITH 601XLB	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that, during takeoff, as the airplane lifted off, the canopy opened. Subsequently, the airplane descended and landed hard, and the nose landing gear collapsed. The airplane sustained substantial damage to the fuselage. A Federal Aviation Administration inspector reported that, during a postaccident examination of the airplane about a week after the accident, the canopy latches appeared to be in good condition and operated fine. The pilot added as a safety recommendation to "double check the canopy latch."

Probable Cause and Findings

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

The pilot's failure to latch the canopy before departure, which resulted in the canopy opening and the subsequent loss of airplane control.

Findings

Aircraft	Windows-windshield system - Incorrect use/operation (Cause)
Personnel issues	Use of equip/system - Pilot (Cause)
	Forgotten action/omission - Pilot (Cause)
	Aircraft control - Pilot (Cause)

Factual Information

History of Flight

Takeoff	Miscellaneous/other (Defining event)
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Pilot Information

Certificate:	Private	Age:	84, 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:	No
Medical Certification:	Sport Pilot	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	08/14/2018
Flight Time:	(Estimated)		

Aircraft and Owner/Operator Information

Aircraft Make:	ZENITH	Registration:	N235JH
Model/Series:	ZENITH 601XLB	Aircraft Category:	Airplane
Year of Manufacture:	2012	Amateur Built:	No
Airworthiness Certificate:	Experimental Light Sport	Serial Number:	6-4287
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	09/30/2019, Condition	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	190 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91A installed	Engine Model/Series:	O-235-C1
Registered Owner:	On file	Rated Power:	108 hp
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KAKH, 797 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1554 UTC	Direction from Accident Site:	223°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.17 inches Hg	Temperature/Dew Point:	24° C / 11° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Gastonia, NC (AKH)	Type of Flight Plan Filed:	Unknown
Destination:	Gastonia, NC (AKH)	Type of Clearance:	Unknown
Departure Time:	1220 EDT	Type of Airspace:	Class G

Airport Information

Airport:	GASTONIA MUNI (AKH)	Runway Surface Type:	Asphalt
Airport Elevation:	797 ft	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	3770 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	35.201944, -81.150278 (est)

Administrative Information

Investigator In Charge (IIC):	Kathryn R Benhoff	Report Date:	05/21/2020
Additional Participating Persons:	Richard Brady; FAA; Charlotte, NC		
Publish Date:	05/21/2020		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=100444		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).