



Aviation Investigation Final Report

Location:	PUNTA GORDA, Florida	Accident Number:	ERA20CA303
Date & Time:	August 29, 2020, 12:20 Local	Registration:	N354DM
Aircraft:	Zenith CH601	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was also the owner/builder of the experimental airplane. He reported that the accident flight was the second flight since he completed assembly of the airplane. During takeoff, about 20 ft above ground level, the cockpit canopy “flew” forward to the full up position. The airplane immediately entered a nose-down attitude and touched back down on the runway with the propeller striking the runway. The airplane then bounced, touched down again, and skidded off the left side of the runway. The nose landing gear collapsed and the airplane came to rest upright in a grass area off the left side of the runway. The forward portion of the airplane’s fuselage was substantially damaged.

The pilot further stated that the canopy latch for the airplane make and model was known to unlatch in flight, so he installed a secondary latch system when he assembled the airplane. The secondary latch system consisted of a latch and catch mechanism that could only be secured from inside the cockpit. He added that the latches had to align perfectly to work. The pilot further noted that the airframe kit manufacturer offered a modification to the canopy latching system, but the pilot had not installed it.

Probable Cause and Findings

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

An inadvertent opening of the airplane’s canopy on takeoff, which resulted in a loss of control and runway excursion.

Findings

Aircraft	Passenger/crew doors - Not specified
Aircraft	Pitch control - Attain/maintain not possible

Factual Information

History of Flight

Prior to flight	Ground handling event
Takeoff	Miscellaneous/other (Defining event)
Takeoff	Loss of control in flight
Takeoff	Abnormal runway contact
Takeoff	Runway excursion
Takeoff	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	64, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	September 11, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 7, 2019
Flight Time:	262 hours (Total, all aircraft), 9 hours (Total, this make and model), 174 hours (Pilot In Command, all aircraft), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Zenith	Registration:	N354DM
Model/Series:	CH601 XL	Aircraft Category:	Airplane
Year of Manufacture:	2020	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	6092
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	August 1, 2020 Condition	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1 Hrs at time of accident	Engine Manufacturer:	Honda
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	Viking 130
Registered Owner:	On file	Rated Power:	130 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PGD,25 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	12:17 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Few / 2700 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	32°C / 25°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PUNTA GORDA, FL (PGD)	Type of Flight Plan Filed:	None
Destination:	PUNTA GORDA, FL (PGD)	Type of Clearance:	None
Departure Time:	12:20 Local	Type of Airspace:	Class D

Airport Information

Airport:	Punta Gorda PGD	Runway Surface Type:	Asphalt
Airport Elevation:	25 ft msl	Runway Surface Condition:	Dry
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	7193 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	26.918888,-81.990837(est)

Administrative Information

Investigator In Charge (IIC):	Gretz, Robert
Additional Participating Persons:	Camanche Cain; FAA/FSDO; Tampa, FL
Original Publish Date:	June 24, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=101902

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