



# Aviation Investigation Final Report

---

<b>Location:</b>	PUNTA GORDA, Florida	<b>Accident Number:</b>	ERA20CA303
<b>Date &amp; Time:</b>	August 29, 2020, 12:20 Local	<b>Registration:</b>	N354DM
<b>Aircraft:</b>	Zenith CH601	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Miscellaneous/other	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	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

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

## Factual Information

### History of Flight

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

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	64, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	September 11, 2019
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	November 7, 2019
<b>Flight Time:</b>	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

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

## Meteorological Information and Flight Plan

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

## Airport Information

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

## Wreckage and Impact Information

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

## Administrative Information

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

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).