



# Aviation Investigation Final Report

<b>Location:</b>	Dublin, Georgia	<b>Accident Number:</b>	ERA23LA291
<b>Date &amp; Time:</b>	June 17, 2023, 12:45 Local	<b>Registration:</b>	PR-ZVL
<b>Aircraft:</b>	Volato 400	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Abnormal runway contact	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that upon returning from a local flight, during the landing flare, he noticed the airplane was still sinking so he “began pulling back on the stick.” The airplane continued to sink, and the pilot added partial power, but the sink rate was not arrested, and the airplane impacted the ground, about 10 ft before the runway threshold. Upon impact with the ground, the nose landing gear collapsed, and the airplane slid about 1,000 ft down the runway. Postaccident examination of the airplane by a Federal Aviation Administration (FAA) inspector found substantial damage to the firewall.

The pilot reported that he felt he used full elevator aft but did not think he was getting full authority and that an autopilot servo bracket may have interfered with the flight control. The safety pilot on board reported that the pilot performed a flight control check before the departure with no anomalies noted. Additionally, during a postaccident examination of the flight controls, the FAA inspector found the autopilot servo bracket was loose on the elevator control tube and a flight control check found the bracket did not restrict the aft movement of the elevator. The postaccident examination otherwise found no evidence of any preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

## Probable Cause and Findings

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

The pilot's improper landing flare which resulted in a runway undershoot and a hard landing, which substantially damaged the airplane's firewall.

## Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Descent rate - Not attained/maintained

## Factual Information

### History of Flight

Landing-flare/touchdown	Landing area undershoot
Landing-flare/touchdown	Abnormal runway contact (Defining event)

### Pilot Information

Certificate:	Private	Age:	48,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	BasicMed With waivers/limitations	Last FAA Medical Exam:	May 1, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 4, 2023
Flight Time:	(Estimated) 230 hours (Total, all aircraft), 12 hours (Total, this make and model), 230 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Pilot-rated passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:			

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Volato	<b>Registration:</b>	PR-ZVL
<b>Model/Series:</b>	400	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2013	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	001
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	June 1, 2023 Condition	<b>Certified Max Gross Wt.:</b>	2800 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	330 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	YIO-390-EXP
<b>Registered Owner:</b>	Volato Aeros	<b>Rated Power:</b>	210 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>	DBN,309 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	12:35 Local	<b>Direction from Accident Site:</b>	182°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	Unknown / Terrain-Induced
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	Unknown / Light
<b>Altimeter Setting:</b>	29.95 inches Hg	<b>Temperature/Dew Point:</b>	32°C / 16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Dublin, GA	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	Dublin, GA	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	W H 'BUD' BARRON DBN	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	311 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	2	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6501 ft / 150 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	32.560239,-82.983889(est)

## Administrative Information

Investigator In Charge (IIC):	Young, Joshua
Additional Participating Persons:	Danny Cox; FAA/FSDO; Atlanta, GA
Original Publish Date:	August 31, 2023
Last Revision Date:	
Investigation Class:	<a href="#">Class 4</a>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=192553">https://data.nts.gov/Docket?ProjectID=192553</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](#).