



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Wagener, South Carolina	<b>Accident Number:</b>	ERA23LA294
<b>Date &amp; Time:</b>	June 13, 2023, 10:30 Local	<b>Registration:</b>	OE-DSD
<b>Aircraft:</b>	Diamond DA50	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Runway excursion	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that he was taking off to the east from his personal, grass airstrip, which was 2,400 ft-long and 75 ft-wide. Surface wind at a nearby airport was from 120° at 8 knots with gusts to 12 knots. Just before rotation on the takeoff roll, he felt a large wind gust and decided to abort the takeoff. He was unable to stop the airplane in the remaining runway, it collided with a fence, the landing gear collapsed, and the airplane came to rest upright. The airplane's wings and fuselage were substantially damaged during the accident. The pilot reported that there were no 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 decision to take off from a short, grass runway in gusting wind conditions, resulting in a rejected takeoff and runway excursion.

## Findings

<b>Aircraft</b>	Surface speed/braking - Capability exceeded
<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Environmental issues</b>	Gusts - Effect on operation

## Factual Information

### History of Flight

Takeoff-rejected takeoff	Runway excursion (Defining event)
--------------------------	-----------------------------------

### Pilot Information

Certificate:	Private	Age:	53, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	April 22, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 10, 2022
Flight Time:	4000 hours (Total, all aircraft), 140 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Diamond	Registration:	OE-DSD
Model/Series:	DA50 C	Aircraft Category:	Airplane
Year of Manufacture:	2022	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	50.C.A.A.017
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	January 5, 2023 100 hour	Certified Max Gross Wt.:	4407 lbs
Time Since Last Inspection:	40 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	173 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	CD300
Registered Owner:	Dantata Holdings Ltd	Rated Power:	300
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:	KAIK, 529 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	09:00 Local	Direction from Accident Site:	290°
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:	Broken / 3000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / 12 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Wagener, SC	Type of Flight Plan Filed:	None
Destination:	Wagener, SC	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

## Airport Information

Airport:	SD Farms N/A	Runway Surface Type:	Grass/turf
Airport Elevation:	333 ft msl	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	2400 ft / 75 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.5976,-81.50911(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hicks, Ralph
<b>Additional Participating Persons:</b>	Dedrick P. Richard; FAA/FSDO; Baltimore, MD
<b>Original Publish Date:</b>	August 31, 2023
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=192606">https://data.nts.gov/Docket?ProjectID=192606</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](#).