



# **Aviation Investigation Final Report**

Location:	Suches, Georgia	Accident Number:	ERA23LA072
Date & Time:	November 26, 2022, 11:26 Local	Registration:	N728RJ
Aircraft:	DANIEL ANTHONY PROCTOR M24 ORION PLUS	Aircraft Damage:	Substantial
Defining Event:	Collision during takeoff/land	Injuries:	1 Serious, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

## Analysis

The gyroplane pilot reported that he initiated his takeoff midway down the runway with a tailwind. After takeoff, the angle of climb was shallower than expected and the pilot determined that he may not clear the trees beyond the runway's departure end. He attempted to turn back toward the runway; however, the gyroplane had insufficient altitude and impacted the brush. The gyroplane sustained substantial damage to the fuselage and tail section and the passenger was seriously injured. The pilot reported that there were no preaccident mechanical failures or malfunctions with the gyroplane that would have precluded normal operation and that he gave up safety margin unnecessarily. He stated that he should have performed a full-length departure into the wind.

# **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 the runway midpoint with a tailwind, which resulted in impact with terrain.

# Findings

Environmental issues	(general) - Decision related to condition	
Personnel issues	Decision making/judgment - Pilot	
Environmental issues	Tailwind - Decision related to condition	

# **Factual Information**

## History of Flight

Initial climb	Collision during takeoff/land (Defining event)
Initial climb	Attempted remediation/recovery
Emergency descent	Off-field or emergency landing

#### **Pilot Information**

Certificate:	Commercial; Private	Age:	66,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Gyroplane	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Waiver time limited special	Last FAA Medical Exam:	January 18, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 7, 2022
Flight Time:	3416 hours (Total, all aircraft), 137 hours (Total, this make and model), 3310 hours (Pilot In Command, all aircraft), 137 hours (Last 90 days, all aircraft), 38 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

# 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:	No
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

## Aircraft and Owner/Operator Information

Aircraft Make:	DANIEL ANTHONY PROCTOR	Registration:	N728RJ
Model/Series:	M24 ORION PLUS	Aircraft Category:	Helicopter
Year of Manufacture:	2022	Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	24223826
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	June 7, 2022 Condition	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:	125 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	127.9 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	915i
Registered Owner:	On file	Rated Power:	141 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:	DZJ,1909 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	16:15 Local	Direction from Accident Site:	9°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	Unknown / None
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.17 inches Hg	Temperature/Dew Point:	17°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Canton, GA (CNI)	Type of Flight Plan Filed:	None
Destination:	Blairsville, GA (DZJ)	Type of Clearance:	None
Departure Time:	11:30 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	High Valley Airpark GA87	Runway Surface Type:	Grass/turf
Airport Elevation:	2800 ft msl	Runway Surface Condition:	Dry
Runway Used:	2	IFR Approach:	None
Runway Length/Width:	2000 ft / 60 ft	VFR Approach/Landing:	Stop and go

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 None	Latitude, Longitude:	34.698131,-84.011144

#### **Administrative Information**

Investigator In Charge (IIC):	Spencer, Lynn
Additional Participating Persons:	Rodney Hood; FAA/FSDO; Atlanta, GA
Original Publish Date:	June 6, 2023
Last Revision Date:	
Investigation Class:	<u>Class 4</u>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=106372

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 <u>here</u>.