



# Aviation Investigation Final Report

<b>Location:</b>	Strawberry Reservoir, Utah	<b>Accident Number:</b>	WPR23LA126
<b>Date &amp; Time:</b>	March 11, 2023, 11:30 Local	<b>Registration:</b>	N553AT
<b>Aircraft:</b>	Trendak Taurus	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision with terr/obj (non-CFIT)	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that, while flying low over a snow-covered frozen lake, the gyrocopter was closer to the surface than he realized. The pilot increased engine power to attempt to climb away from the surface, however, the nosewheel impacted snow on the surface and the gyrocopter nosed over, rolled, and came to rest on its side. The fuselage, horizontal stabilizer, and rudders were substantially damaged. The pilot reported that there were no preaccident mechanical malfunctions or failures with the gyrocopter 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 failure to maintain clearance from the snow-covered lake while flying at a low altitude.

## Findings

<b>Personnel issues</b>	Monitoring environment - Pilot
<b>Aircraft</b>	Altitude - Not attained/maintained
<b>Environmental issues</b>	Snowy/icy terrain - Effect on operation

## Factual Information

### History of Flight

<b>Maneuvering-low-alt flying</b>	Collision with terr/obj (non-CFIT) (Defining event)
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### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	59,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	Gyroplane	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	May 14, 2021
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	550.3 hours (Total, all aircraft), 33.2 hours (Total, this make and model), 489 hours (Pilot In Command, all aircraft), 13.1 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 0.7 hours (Last 24 hours, all aircraft)		

### Passenger Information

<b>Certificate:</b>		<b>Age:</b>	Male
<b>Airplane Rating(s):</b>		<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>		<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>		<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>			

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Trendak	<b>Registration:</b>	N553AT
<b>Model/Series:</b>	Taurus	<b>Aircraft Category:</b>	Gyroplane
<b>Year of Manufacture:</b>	2017	<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	T&S F26917S
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	January 7, 2023 Annual	<b>Certified Max Gross Wt.:</b>	1320 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Turbo shaft
<b>Airframe Total Time:</b>	140 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Rotax
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	912 UL 2-01
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	160 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>	KPVU, 4497 ft msl	<b>Distance from Accident Site:</b>	27 Nautical Miles
<b>Observation Time:</b>	10:56 Local	<b>Direction from Accident Site:</b>	276°
<b>Lowest Cloud Condition:</b>	Few / 6000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 20000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<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 inches Hg	<b>Temperature/Dew Point:</b>	3°C / -5°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Provo, UT (KPVU)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Provo, UT (KPVU)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:49 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor	<b>Latitude, Longitude:</b>	40.17,-111.13(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Blocher, Kristyn
<b>Additional Participating Persons:</b>	John Hansen; Federal Aviation Administration; SLC
<b>Original Publish Date:</b>	April 20, 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.ntsb.gov/Docket?ProjectID=106882">https://data.ntsb.gov/Docket?ProjectID=106882</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](#).