



# Aviation Investigation Final Report

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|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Lubbock, Texas                       | <b>Accident Number:</b> | CEN22LA150  |
| <b>Date &amp; Time:</b>        | March 23, 2022, 10:46 Local          | <b>Registration:</b>    | N430HS      |
| <b>Aircraft:</b>               | Sparrow Hawk III                     | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         | Loss of control in flight            | <b>Injuries:</b>        | 1 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |             |

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## Analysis

Shortly after takeoff the pilot “felt a force straight down.” The gyroplane impacted the terrain hard, rolled over, and came to rest on its side adjacent to the runway. The gyroplane sustained substantial damage to the fuselage and stabilizers. Reported winds about the time accident included wind gusts and a peak wind of 30 knots. A postaccident examination of the gyroplane revealed no evidence of mechanical malfunctions or failures 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 control of the gyrocopter during takeoff with strong gusty winds.

## Findings

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|                             |                                     |
|-----------------------------|-------------------------------------|
| <b>Personnel issues</b>     | Decision making/judgment - Pilot    |
| <b>Environmental issues</b> | Gusts - Effect on operation         |
| <b>Aircraft</b>             | (general) - Not attained/maintained |
| <b>Personnel issues</b>     | Aircraft control - Pilot            |

## Factual Information

### History of Flight

|                      |  |
|----------------------|--|
| <b>Initial climb</b> | Other weather encounter                    |
| <b>Initial climb</b> | Loss of control in flight (Defining event) |

### Pilot Information

|                                  |   |  |               |
|----------------------------------|---|--|---------------|
| <b>Certificate:</b>              | Commercial; Flight instructor;<br>Private   | <b>Age:</b>                              | 56, Male      |
| <b>Airplane Rating(s):</b>       | Single-engine land  | <b>Seat Occupied:</b>                    | Left          |
| <b>Other Aircraft Rating(s):</b> | Gyroplane   | <b>Restraint Used:</b>                   | 4-point       |
| <b>Instrument Rating(s):</b>     | Airplane  | <b>Second Pilot Present:</b>             | No            |
| <b>Instructor Rating(s):</b>     | Airplane single-engine  | <b>Toxicology Performed:</b>             |               |
| <b>Medical Certification:</b>    | Class 2 With waivers/limitations  | <b>Last FAA Medical Exam:</b>            | March 1, 2022 |
| <b>Occupational Pilot:</b>       | No  | <b>Last Flight Review or Equivalent:</b> |               |
| <b>Flight Time:</b>              | 1041 hours (Total, all aircraft), 33 hours (Total, this make and model), 836 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft) |  |               |

### Aircraft and Owner/Operator Information

|                                      |                              |                                       |                 |
|--------------------------------------|------------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | Sparrow Hawk                 | <b>Registration:</b>                  | N430HS          |
| <b>Model/Series:</b>                 | III                          | <b>Aircraft Category:</b>             | Gyroplane       |
| <b>Year of Manufacture:</b>          |                              | <b>Amateur Built:</b>                 | Yes             |
| <b>Airworthiness Certificate:</b>    | Experimental (Special)       | <b>Serial Number:</b>                 | S03-0003        |
| <b>Landing Gear Type:</b>            | Tricycle                     | <b>Seats:</b>                         | 2               |
| <b>Date/Type of Last Inspection:</b> | March 21, 2022 Condition     | <b>Certified Max Gross Wt.:</b>       |                 |
| <b>Time Since Last Inspection:</b>   |                              | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 69 Hrs as of last inspection | <b>Engine Manufacturer:</b>           | Subaru          |
| <b>ELT:</b>                          | Not installed                | <b>Engine Model/Series:</b>           | EJ-25           |
| <b>Registered Owner:</b>             | On file                      | <b>Rated Power:</b>                   |                 |
| <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> | KLBB,3241 ft msl                 | <b>Distance from Accident Site:</b>         | 11 Nautical Miles |
| <b>Observation Time:</b>                | 10:53 Local                      | <b>Direction from Accident Site:</b>        | 358°              |
| <b>Lowest Cloud Condition:</b>          | Few / 6000 ft AGL                | <b>Visibility</b>                           | 10 miles          |
| <b>Lowest Ceiling:</b>                  |                                  | <b>Visibility (RVR):</b>                    |                   |
| <b>Wind Speed/Gusts:</b>                | 19 knots / 30 knots              | <b>Turbulence Type Forecast/Actual:</b>     | /                 |
| <b>Wind Direction:</b>                  | 320°                             | <b>Turbulence Severity Forecast/Actual:</b> | /                 |
| <b>Altimeter Setting:</b>               | 30.11 inches Hg                  | <b>Temperature/Dew Point:</b>               | 10°C / -7°C       |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |                   |
| <b>Departure Point:</b>                 | Lubbock, TX                      | <b>Type of Flight Plan Filed:</b>           | None              |
| <b>Destination:</b>                     | Lubbock, TX                      | <b>Type of Clearance:</b>                   | None              |
| <b>Departure Time:</b>                  |                                  | <b>Type of Airspace:</b>                    | Class G           |

## Airport Information

|                             |                               |                                  |         |
|-----------------------------|-------------------------------|----------------------------------|---------|
| <b>Airport:</b>             | Lubbock Executive Airpark F82 | <b>Runway Surface Type:</b>      | Asphalt |
| <b>Airport Elevation:</b>   | 3200 ft msl                   | <b>Runway Surface Condition:</b> | Dry     |
| <b>Runway Used:</b>         | 35                            | <b>IFR Approach:</b>             | None    |
| <b>Runway Length/Width:</b> | 3500 ft / 70 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>    |        | <b>Aircraft Explosion:</b>  | None                      |
| <b>Total Injuries:</b>     | 1 None | <b>Latitude, Longitude:</b> | 33.485853,-101.81374(est) |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Sauer, Aaron  |
| <b>Additional Participating Persons:</b> | Steven White; FAA; Lubbock, TX  |
| <b>Original Publish Date:</b>            | July 5, 2022  |
| <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=104822">https://data.nts.gov/Docket?ProjectID=104822</a> |

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