



# **Aviation Investigation Final Report**

Location: Floodwood, Minnesota Accident Number: GAA19CA154

Date & Time: February 28, 2019, 13:35 Local Registration: N111YT

Aircraft: Denney KITFOX MDL CLASSICIV Aircraft Damage: Substantial

**Defining Event:** Nose over/nose down **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot of the tailwheel-equipped airplane reported that, during landing in a crosswind, he planned to touch down 2 ft past the beginning of the compacted, snow-covered, private airstrip. He added that, "in order to perform [the short field landing, he] chose to ride the tires just over the terrain until touchdown." He reported further that, after the front main landing gear touched down, a wind gust picked up the right wing, the left tire sank in the snow, and the airplane decelerated and then nosed over.

The airplane sustained substantial damage to the left wing.

The pilot reported that there were not preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The pilot reported that the wind at the accident location, about the time of the accident, was from 230° at 9 knots, gusting to 15 knots. The pilot was landing the airplane to the southwest on a 210° heading.

### **Probable Cause and Findings**

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

The pilot's loss of lateral control while landing in gusting crosswind conditions, which resulted in a nose-over.

### **Findings**

Aircraft Crosswind correction - Not attained/maintained

Personnel issues Aircraft control - Pilot

**Environmental issues** Crosswind - Effect on operation

**Environmental issues** Gusts - Effect on operation

**Environmental issues** Snowy/icy terrain - Effect on operation

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## **Factual Information**

## **History of Flight**

| Landing | Other weather encounter              |
|---------|--------------------------------------|
| Landing | Nose over/nose down (Defining event) |

#### **Pilot Information**

| Certificate:              | Sport Pilot  | Age:                              | 35,Male            |
|---------------------------|--|-----------------------------------|--------------------|
| Airplane Rating(s):       | Single-engine land   | Seat Occupied:                    | Left               |
| Other Aircraft Rating(s): | None   | Restraint Used:                   | 4-point            |
| Instrument Rating(s):     | None   | Second Pilot Present:             | No                 |
| Instructor Rating(s):     | None   | Toxicology Performed:             | No                 |
| Medical Certification:    | Class 3 Without waivers/limitations  | Last FAA Medical Exam:            | September 23, 2016 |
| Occupational Pilot:       | No   | Last Flight Review or Equivalent: | February 28, 2019  |
| Flight Time:              | (Estimated) 233 hours (Total, all aircraft), 111 hours (Total, this make and model), 233 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft) |                                   |                    |

### **Aircraft and Owner/Operator Information**

| Denney  | Registration:   | N111YT  |
|---|---|---|
| KITFOX MDL CLASSICIV<br>IV1200                              | Aircraft Category:  | Airplane  |
| 2007  | Amateur Built:  | Yes   |
| Experimental (Special)                                      | Serial Number:  | C97070196   |
| Tailwheel   | Seats:  | 2   |
| May 22, 2018 Condition                                      | Certified Max Gross Wt.:  | 1200 lbs  |
|   | Engines:  | 1 Reciprocating   |
| 528.9 Hrs as of last inspection                             | Engine Manufacturer:  | Rotax   |
| C126 installed, activated, did not aid in locating accident | Engine Model/Series:  | 912UL   |
|   | Rated Power:  | 80 Horsepower   |
| On file   | Operating Certificate(s)<br>Held:   | None  |
|   | KITFOX MDL CLASSICIV IV1200 2007 Experimental (Special) Tailwheel May 22, 2018 Condition  528.9 Hrs as of last inspection C126 installed, activated, did not aid in locating accident | KITFOX MDL CLASSICIV IV1200  2007  Amateur Built:  Experimental (Special)  Tailwheel  May 22, 2018 Condition  Certified Max Gross Wt.:  Engines:  528.9 Hrs as of last inspection  C126 installed, activated, did not aid in locating accident  Rated Power:  On file  Operating Certificate(s) |

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### **Meteorological Information and Flight Plan**

| Conditions at Accident Site:     | Visual (VMC)                 | Condition of Light:                  | Day               |
|----------------------------------|------------------------------|--------------------------------------|-------------------|
| Observation Facility, Elevation: | KCOQ,1279 ft msl             | Distance from Accident Site:         | 21 Nautical Miles |
| Observation Time:                | 13:21 Local                  | Direction from Accident Site:        | 141°              |
| <b>Lowest Cloud Condition:</b>   | Scattered / 8000 ft AGL      | Visibility                           | 10 miles          |
| Lowest Ceiling:                  |                              | Visibility (RVR):                    |                   |
| Wind Speed/Gusts:                | 4 knots /                    | Turbulence Type<br>Forecast/Actual:  | None / None       |
| Wind Direction:                  | 220°                         | Turbulence Severity Forecast/Actual: | N/A / N/A         |
| Altimeter Setting:               | 30.04 inches Hg              | Temperature/Dew Point:               | -22°C / -24°C     |
| Precipitation and Obscuration:   | No Obscuration; No Precipita | ation                                |                   |
| Departure Point:                 | Cloquet, MN (COQ)            | Type of Flight Plan Filed:           | None              |
| Destination:                     | Floodwood, MN (PVT)          | Type of Clearance:                   | None              |
| Departure Time:                  | 13:15 Local                  | Type of Airspace:                    | Class G           |
|                                  |                              |                                      |                   |

## **Airport Information**

| Airport:             | PVT PVT         | Runway Surface Type:             | Snow                  |
|----------------------|-----------------|----------------------------------|-----------------------|
| Airport Elevation:   | 1223 ft msl     | <b>Runway Surface Condition:</b> | Snow                  |
| Runway Used:         | 21              | IFR Approach:                    | None                  |
| Runway Length/Width: | 1300 ft / 60 ft | VFR Approach/Landing:            | Full stop;Straight-in |

## Wreckage and Impact Information

| Crew Injuries:      | 1 None | Aircraft Damage:        | Substantial               |
|---------------------|--------|-------------------------|---------------------------|
| Passenger Injuries: |        | Aircraft Fire:          | None                      |
| Ground Injuries:    | N/A    | Aircraft Explosion:     | None                      |
| Total Injuries:     | 1 None | Latitude,<br>Longitude: | 46.976943,-92.830001(est) |

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#### **Administrative Information**

Investigator In Charge (IIC): Swenson, Eric

Additional Participating Persons: Nikolas Halatsis; FAA; Minneapolis, MN

Original Publish Date: November 6, 2019

Note: This accident report documents the factual circumstances of this accident as described to

the NTSB.

Investigation Docket: <a href="https://data.ntsb.gov/Docket?ProjectID=99033">https://data.ntsb.gov/Docket?ProjectID=99033</a>

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available <a href="here">here</a>.

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