

# **Aviation Investigation Final Report**

| Location:               | Nappanee, Indiana                    | Accident Number: | CHI04CA221  |
|-------------------------|--------------------------------------|------------------|-------------|
| Date & Time:            | August 10, 2004, 18:30 Local         | Registration:    | N7940Q      |
| Aircraft:               | Cessna 310Q                          | Aircraft Damage: | Substantial |
| Defining Event:         |                                      | Injuries:        | 5 None      |
| Flight Conducted Under: | Part 91: General aviation - Personal |                  |             |

### **Analysis**

The airplane sustained substantial damage on impact with terrain during an aborted takeoff. The pilot's stated, "It was a perfect takeoff, until I reached 105 mph. I attempted to rotate the plane, but was unable to even lift the nose wheel off the ground. I tried again at 115 mph, but the plane was still unresponsive. After the 2nd failed rotation attempt, I immediately closed the throttles and applied heavy breaking. ... While I kept the plane straight, we went through a barb-wire fence, up over a road, down an easement and stopped in a farmer's field."

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The delay in the pilot's performance of an aborted takeoff. A factor was the reported restricted movement of the elevator. Additional factors were the rising easement and roadway the airplane went over before coming to rest in the farmers field.

### **Findings**

Occurrence #1: MISCELLANEOUS/OTHER Phase of Operation: TAKEOFF - ABORTED

Findings 1. (F) FLT CONTROL SYST, ELEVATOR CONTROL - MOVEMENT RESTRICTED 2. (C) ABORTED TAKEOFF - DELAYED - PILOT IN COMMAND 3. (F) TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT 4. (F) TERRAIN CONDITION - ROADWAY/HIGHWAY

### **Factual Information**

On August 10, 2004, about 1830 central daylight time, a Cessna 310Q, N7940Q, piloted by a private pilot, sustained substantial damage on impact with terrain during an aborted takeoff from runway 27 at Nappanee Municipal Airport, near Nappanee, Indiana. The personal flight was operating under 14 CFR Part 91. Visual meteorological conditions prevailed at the time of the accident. An Instrument Flight Rules flight plan was on file. The pilot reported that he and his four passengers were uninjured. The flight was originating at the time of the accident and was destined for Griffing Sandusky Airport, near Sandusky, Ohio.

The pilot said that he completed a preflight inspection of the airplane. The pilot's accident report stated:

While taxing, I noticed there was about 300 feet of unusable sod at the end of he runway. I then held the brakes, applied full power, and started my takeoff roll. It was a perfect takeoff, until I reached 105 mph. I attempted to rotate the plane, but was unable to even lift the nose wheel off the ground. I tried again at 115 mph, but the plane was still unresponsive. After the 2nd failed rotation attempt, I immediately closed the throttles and applied heavy breaking. I threw off my headset and told all passengers to hold on. When I saw that I was going to be unable to stop the plane before hitting the fence, I told all passengers to brace themselves. While I kept the plane straight, we went through a barb-wire fence, up over a road, down an easement and stopped in a farmer's field. Upon hitting the easement, the right main landing gear collapsed. As soon as the plane came to a complete stop, I told [apassenger] to open the door now, and I told all the passengers to evacuate the plane immediately, meanwhile I closed the mixtures and shut down the master and magnetos, then exited the plane.

### **Pilot Information**

| Certificate:              | Private  | Age:                              | 24,Male          |
|---------------------------|--|-----------------------------------|------------------|
| Airplane Rating(s):       | Single-engine land; Multi-engine<br>land   | Seat Occupied:                    | Left             |
| Other Aircraft Rating(s): | None   | Restraint Used:                   |                  |
| Instrument Rating(s):     | Airplane   | Second Pilot Present:             | No               |
| Instructor Rating(s):     | None   | Toxicology Performed:             | No               |
| Medical Certification:    | Class 3 Valid Medical–w/<br>waivers/lim  | Last FAA Medical Exam:            | January 20, 2004 |
| Occupational Pilot:       | No   | Last Flight Review or Equivalent: | July 27, 2003    |
| Flight Time:              | 710 hours (Total, all aircraft), 130 hours (Total, this make and model), 620 hours (Pilot In<br>Command, all aircraft), 50 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft),<br>1 hours (Last 24 hours, all aircraft) |                                   |                  |

# Aircraft and Owner/Operator Information

| Aircraft Make:                   | Cessna                        | Registration:                     | N7940Q          |
|----------------------------------|-------------------------------|-----------------------------------|-----------------|
| Model/Series:                    | 310Q                          | Aircraft Category:                | Airplane        |
| Year of Manufacture:             |                               | Amateur Built:                    |                 |
| Airworthiness Certificate:       | Normal                        | Serial Number:                    | 310Q0623        |
| Landing Gear Type:               | Retractable - Tricycle        | Seats:                            | б               |
| Date/Type of Last<br>Inspection: | July 1, 2004 Annual           | Certified Max Gross Wt.:          | 5300 lbs        |
| Time Since Last Inspection:      | 15 Hrs                        | Engines:                          | 2 Reciprocating |
| Airframe Total Time:             | 14000 Hrs at time of accident | Engine Manufacturer:              | Continental     |
| ELT:                             | Installed, not activated      | Engine Model/Series:              | 10-470          |
| Registered Owner:                | Lazy Eight Aviation           | Rated Power:                      | 260 Horsepower  |
| Operator:                        |                               | Operating Certificate(s)<br>Held: | None            |

### Meteorological Information and Flight Plan

| Conditions at Accident Site:            | Visual (VMC)            | Condition of Light:                     | Dusk        |
|---|-------------------------|---|-------------|
| <b>Observation Facility, Elevation:</b> | GSH                     | Distance from Accident Site:            |             |
| Observation Time:                       | 18:24 Local             | Direction from Accident Site:           |             |
| Lowest Cloud Condition:                 | Scattered / 2300 ft AGL | Visibility                              | 10 miles    |
| Lowest Ceiling:                         | Broken / 3100 ft AGL    | Visibility (RVR):                       |             |
| Wind Speed/Gusts:                       | 8 knots /               | Turbulence Type<br>Forecast/Actual:     | /           |
| Wind Direction:                         | 260°                    | Turbulence Severity<br>Forecast/Actual: | /           |
| Altimeter Setting:                      | 29.93 inches Hg         | Temperature/Dew Point:                  | 18°C / 14°C |
| Precipitation and Obscuration:          |                         |   |             |
| Departure Point:                        | Nappanee, IN (C03 )     | Type of Flight Plan Filed:              | IFR         |
| Destination:                            | SANDUSKY, OH (SKY )     | Type of Clearance:                      | None        |
| Departure Time:                         | 18:30 Local             | Type of Airspace:                       | Class G     |

# Wreckage and Impact Information

| Crew Injuries:         | 1 None | Aircraft Damage:        | Substantial          |
|------------------------|--------|-------------------------|----------------------|
| Passenger<br>Injuries: | 4 None | Aircraft Fire:          | None                 |
| Ground Injuries:       | N/A    | Aircraft Explosion:     | None                 |
| Total Injuries:        | 5 None | Latitude,<br>Longitude: | 41.446109,-85.934722 |

### **Administrative Information**

| Investigator In Charge (IIC):        | Malinowski, Edward  |
|--------------------------------------|---|
| Additional Participating<br>Persons: | Daniel T Sedberry; Federal Aviation Administration; South Bend, IN                                  |
| Original Publish Date:               | December 28, 2004   |
| Last Revision Date:                  |   |
| Investigation Class:                 | <u>Class</u>  |
| Note:                                | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=59938  |

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