



# **Aviation Investigation Final Report**

| Location:               | Moultonboro, New Hampshire           | Accident Number: | IAD01LA085  |
|-------------------------|--------------------------------------|------------------|-------------|
| Date & Time:            | July 24, 2001, 12:30 Local           | Registration:    | N4352V      |
| Aircraft:               | Cessna 195                           | Aircraft Damage: | Substantial |
| Defining Event:         |                                      | Injuries:        | 2 None      |
| Flight Conducted Under: | Part 91: General aviation - Personal |                  |             |

### Analysis

The pilot approached runway 20 from the left to compensate for a crosswind. However, at the point of touchdown, the airplane encountered a strong gust from the west, and the pilot did not have enough rudder authority to correct for the crosswind. The airplane traveled off the right side of the runway and "ground-looped", which resulted in substantial damage to the left main landing gear and left wing. The winds reported at Laconia Airport, Laconia, New Hampshire, at 1235, were from 230 degrees at 14 knots, gusting to 19 knots. The pilot reported 1,845 hours of total flight experience, of which 113 were in make and model, and that there were no mechanical deficiencies.

#### **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 directional control of the airplane. A factor was the crosswind.

#### **Findings**

Findings 1. (F) WEATHER CONDITION - CROSSWIND 2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

#### **Factual Information**

On July 24, 2001 about 1230 eastern daylight time, a Cessna 195, N4352V, was substantially damaged during landing at the Moultonboro Airport (5M3), Moultonboro, New Hampshire. The certificated commercial pilot and passenger were not injured. Visual meteorological conditions prevailed and no flight plan was filed for the personal flight conducted under 14 CFR Part 91.

According to the pilot, he departed from runway 20 at 5M3, about 1200, and the wind was blowing from the south. He performed a local flight, and when he returned to the airport the wind had changed direction as the result of a passing weather front. He estimated the wind was blowing from the west, gusting to 30 knots. The pilot reported that he made his approach to the left of runway 20 to compensate for the crosswind, and at the point of touchdown, the airplane encountered a strong gust from the west. The pilot reported he did not have enough rudder authority to correct for the crosswind, and the airplane traveled off the right side of the runway. The airplane then "ground-looped," the landing gear broke off, and the airplane slid to a stop.

The pilot stated that his normal procedure for correcting for a crosswind was to "fly the airplane into the wind." He reported that he followed this procedure on the day of the accident; however, the wind was "too strong." The pilot reported that there were no mechanical deficiencies with the airplane.

A Federal Aviation Administration (FAA) inspector examined the airplane. According to the inspector, the left main landing gear collapsed and the left wing spar was bent. He also reported that there were no mechanical deficiencies with the airplane.

The runway at 5M3 was oriented on a heading of 02/20 degrees, and was 3,625 feet long and 50 feet wide.

The pilot reported a total of 1,845 hours of total flight experience, 113 of which were in make and model.

The winds reported at Laconia Airport, Laconia, New Hampshire, 12 miles to the south of 5M3, were from 230 degrees at 14 knots, gusting to 19 knots.

#### **Pilot Information**

| Commercial   | Age:   | 72,Male   |
|--|--|---|
| Single-engine land; Single-engine<br>sea                                 | Seat Occupied:   | Left  |
| None   | Restraint Used:  |   |
| None   | Second Pilot Present:  | No  |
| None   | Toxicology Performed:  | No  |
| Class 3 Valid Medicalw/<br>waivers/lim                                   | Last FAA Medical Exam:   | December 2, 1999  |
| UNK  | Last Flight Review or Equivalent:  | August 4, 1999  |
| 1845 hours (Total, all aircraft), 113 hours (Total, this make and model) |  |   |
|  | Single-engine land; Single-engine<br>sea<br>None<br>None<br>Class 3 Valid Medicalw/<br>waivers/lim | Single-engine land; Single-engine<br>seaSeat Occupied:NoneRestraint Used:NoneSecond Pilot Present:NoneToxicology Performed:Class 3 Valid Medicalw/<br>waivers/limLast FAA Medical Exam:UNKLast Flight Review or Equivalent: |

### Aircraft and Owner/Operator Information

| Aircraft Make:                   | Cessna                       | Registration:                     | N4352V          |
|----------------------------------|------------------------------|-----------------------------------|-----------------|
| Model/Series:                    | 195                          | Aircraft Category:                | Airplane        |
| Year of Manufacture:             |                              | Amateur Built:                    |                 |
| Airworthiness Certificate:       | Normal                       | Serial Number:                    | 7261            |
| Landing Gear Type:               | Tailwheel                    | Seats:                            | 4               |
| Date/Type of Last<br>Inspection: | June 1, 2001 Annual          | Certified Max Gross Wt.:          | 3350 lbs        |
| Time Since Last Inspection:      | 3 Hrs                        | Engines:                          | 1 Reciprocating |
| Airframe Total Time:             | 2398 Hrs at time of accident | Engine Manufacturer:              | Jacobs          |
| ELT:                             | Installed, not activated     | Engine Model/Series:              | L4/R755-7       |
| Registered Owner:                | Fredrick Trevor Jr.          | Rated Power:                      | 245 Horsepower  |
| Operator:                        |                              | Operating Certificate(s)<br>Held: | None            |

### Meteorological Information and Flight Plan

| Conditions at Accident Site:     |                                  | Condition of Light:                     | Day               |
|----------------------------------|----------------------------------|---|-------------------|
| conditions at Accident Site.     | Visual (VMC)                     | Condition of Light.                     | Day               |
| Observation Facility, Elevation: | LCI,545 ft msl                   | Distance from Accident Site:            | 12 Nautical Miles |
| Observation Time:                | 12:35 Local                      | Direction from Accident Site:           | 180°              |
| Lowest Cloud Condition:          | Clear                            | Visibility                              | 8 miles           |
| Lowest Ceiling:                  | None                             | Visibility (RVR):                       |                   |
| Wind Speed/Gusts:                | 14 knots / 19 knots              | Turbulence Type<br>Forecast/Actual:     | /                 |
| Wind Direction:                  | 230°                             | Turbulence Severity<br>Forecast/Actual: | /                 |
| Altimeter Setting:               | 29.76 inches Hg                  | Temperature/Dew Point:                  | 32°C / 21°C       |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation |   |                   |
| Departure Point:                 | Moultonboro, NH (5M3)            | Type of Flight Plan Filed:              | None              |
| Destination:                     | (5M3)                            | Type of Clearance:                      | None              |
| Departure Time:                  | 12:00 Local                      | Type of Airspace:                       | Class G           |

## **Airport Information**

| Airport:             | Moultonboro Airport 5M3 | Runway Surface Type:      | Asphalt                   |
|----------------------|-------------------------|---------------------------|---------------------------|
| Airport Elevation:   | 571 ft msl              | Runway Surface Condition: | Rough                     |
| Runway Used:         | 20                      | IFR Approach:             | None                      |
| Runway Length/Width: | 3625 ft / 50 ft         | VFR Approach/Landing:     | Full stop;Traffic pattern |

## Wreckage and Impact Information

| Crew Injuries:         | 1 None | Aircraft Damage:        | Substantial          |
|------------------------|--------|-------------------------|----------------------|
| Passenger<br>Injuries: | 1 None | Aircraft Fire:          | None                 |
| Ground Injuries:       | N/A    | Aircraft Explosion:     | None                 |
| Total Injuries:        | 2 None | Latitude,<br>Longitude: | 43.768333,-71.386665 |

#### **Administrative Information**

| Investigator In Charge (IIC):        | Andrews, Jill  |
|--------------------------------------|--|
| Additional Participating<br>Persons: | Dennis Delo; Federal Aviation Administration; Portland, ME |
| Original Publish Date:               | September 10, 2002   |
| Last Revision Date:                  |  |
| Investigation Class:                 | <u>Class</u>   |
| Note:                                | The NTSB traveled to the scene of this accident.           |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=52811               |

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.