



# Aviation Investigation Final Report

|                                |   |                         |             |
|--------------------------------|---|-------------------------|-------------|
| <b>Location:</b>               | Ambler, Alaska  | <b>Accident Number:</b> | GAA18CA492  |
| <b>Date &amp; Time:</b>        | August 15, 2018, 12:00 Local                                | <b>Registration:</b>    | N9949N      |
| <b>Aircraft:</b>               | Cessna 180  | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         | Loss of control on ground                                   | <b>Injuries:</b>        | 2 None      |
| <b>Flight Conducted Under:</b> | Part 135: Air taxi & commuter - Non-scheduled - Sightseeing |                         |             |

## Analysis

The pilot in the tailwheel-equipped airplane reported that he landed the airplane on an upsloping, uneven sand bar. During the landing roll, the airplane's nose pivoted to the right, and the left wing and horizontal stabilizer struck the ground.

The left-wing spar, the left aileron, and the left side of the vertical stabilizer and elevator sustained substantial damage.

The pilot reported that there were no mechanical malfunctions or failures with the airplane 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 selection of unsuitable terrain for landing, which resulted in the left wing and horizontal stabilizer striking the ground.

## Findings

|                      |   |
|----------------------|---|
| Personnel issues     | Decision making/judgment - Pilot            |
| Environmental issues | Sloped/uneven terrain - Effect on operation |

## Factual Information

### History of Flight

|                      |  |
|----------------------|--|
| Landing-landing roll | Loss of control on ground (Defining event) |
| Landing-landing roll | Collision with terr/obj (non-CFIT)         |

### Pilot Information

|                           |   |                                   |                |
|---------------------------|---|-----------------------------------|----------------|
| Certificate:              | Airline transport; Commercial   | Age:                              | 58,Male        |
| Airplane Rating(s):       | Single-engine land; Single-engine sea; Multi-engine land  | Seat Occupied:                    | Left           |
| Other Aircraft Rating(s): | None  | Restraint Used:                   | 3-point        |
| Instrument Rating(s):     | Airplane  | Second Pilot Present:             | No             |
| Instructor Rating(s):     | None  | Toxicology Performed:             | Yes            |
| Medical Certification:    | Class 2 With waivers/limitations  | Last FAA Medical Exam:            | April 10, 2018 |
| Occupational Pilot:       | Yes   | Last Flight Review or Equivalent: | June 21, 2018  |
| Flight Time:              | (Estimated) 5573 hours (Total, all aircraft), 1565 hours (Total, this make and model), 5474 hours (Pilot In Command, all aircraft), 238 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft) |                                   |                |

### Aircraft and Owner/Operator Information

|                               |                          |                                |                          |
|-------------------------------|--------------------------|--------------------------------|--------------------------|
| Aircraft Make:                | Cessna                   | Registration:                  | N9949N                   |
| Model/Series:                 | 180 J                    | Aircraft Category:             | Airplane                 |
| Year of Manufacture:          | 1975                     | Amateur Built:                 |                          |
| Airworthiness Certificate:    | Normal                   | Serial Number:                 | 18052604                 |
| Landing Gear Type:            | Tailwheel                | Seats:                         | 4                        |
| Date/Type of Last Inspection: | 100 hour                 | Certified Max Gross Wt.:       | 3190 lbs                 |
| Time Since Last Inspection:   |                          | Engines:                       | 1 Reciprocating          |
| Airframe Total Time:          |                          | Engine Manufacturer:           | Continental              |
| ELT:                          | Installed, not activated | Engine Model/Series:           | O-470                    |
| Registered Owner:             |                          | Rated Power:                   |                          |
| Operator:                     |                          | Operating Certificate(s) Held: | On-demand air taxi (135) |

## Meteorological Information and Flight Plan

|                                  |                                  |                                      |                   |
|----------------------------------|----------------------------------|--------------------------------------|-------------------|
| Conditions at Accident Site:     | Visual (VMC)                     | Condition of Light:                  | Day               |
| Observation Facility, Elevation: | PAFM,289 ft msl                  | Distance from Accident Site:         | 25 Nautical Miles |
| Observation Time:                | 19:56 Local                      | Direction from Accident Site:        | 83°               |
| Lowest Cloud Condition:          | Clear                            | Visibility                           | 10 miles          |
| Lowest Ceiling:                  | None                             | Visibility (RVR):                    |                   |
| Wind Speed/Gusts:                | /                                | Turbulence Type Forecast/Actual:     | /                 |
| Wind Direction:                  |                                  | Turbulence Severity Forecast/Actual: | /                 |
| Altimeter Setting:               | 29.92 inches Hg                  | Temperature/Dew Point:               | 9°C / -1°C        |
| Precipitation and Obscuration:   | No Obscuration; No Precipitation |                                      |                   |
| Departure Point:                 | Bettles, AK (BTT )               | Type of Flight Plan Filed:           | Company VFR       |
| Destination:                     | Bettles, AK (BTT )               | Type of Clearance:                   | None              |
| Departure Time:                  |                                  | Type of Airspace:                    | Class E           |

## Wreckage and Impact Information

|                     |        |                      |                            |
|---------------------|--------|----------------------|----------------------------|
| Crew Injuries:      | 1 None | Aircraft Damage:     | Substantial                |
| Passenger Injuries: | 1 None | Aircraft Fire:       | None                       |
| Ground Injuries:    | N/A    | Aircraft Explosion:  | None                       |
| Total Injuries:     | 2 None | Latitude, Longitude: | 67.050003,-158.910003(est) |

## Administrative Information

|                                   |   |
|-----------------------------------|---|
| Investigator In Charge (IIC):     | Hicks, Michael  |
| Additional Participating Persons: | FAA; Fairbanks, AK  |
| Original Publish Date:            | September 26, 2019  |
| Note:                             | This accident report documents the factual circumstances of this accident as described to the NTSB.   |
| Investigation Docket:             | <a href="https://data.nts.gov/Docket?ProjectID=98082">https://data.nts.gov/Docket?ProjectID=98082</a> |

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