



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Anchorage, Alaska                    | <b>Accident Number:</b> | ANC23LA040  |
| <b>Date &amp; Time:</b>        | June 4, 2023, 10:30 Local            | <b>Registration:</b>    | N83330      |
| <b>Aircraft:</b>               | Piper PA-18-150                      | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         | Nose over/nose down                  | <b>Injuries:</b>        | 1 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |             |

## Analysis

The pilot of the tailwheel-equipped airplane reported that, while conducting an off airport landing to a sand bar, the airplane landed beyond the intended landing point. During the landing roll on soft terrain, the pilot applied heavy braking and the airplane nosed over.

The airplane sustained substantial damage to the right wing, right-wing lift strut and rudder.

The pilot reported that there were no preaccident mechanical failures or malfunctions 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 excessive braking during landing on a sand bar, which resulted in a nose-over.

## Findings

|                             |                                    |
|-----------------------------|------------------------------------|
| <b>Personnel issues</b>     | Use of equip/system - Pilot        |
| <b>Aircraft</b>             | Brake - Incorrect use/operation    |
| <b>Environmental issues</b> | Soft surface - Effect on operation |

## Factual Information

### History of Flight

|                      |                                      |
|----------------------|--------------------------------------|
| Landing-landing roll | Nose over/nose down (Defining event) |
|----------------------|--------------------------------------|

### Pilot Information

|                           |   |                                   |                |
|---------------------------|---|-----------------------------------|----------------|
| Certificate:              | Private   | Age:                              | 79,Male        |
| Airplane Rating(s):       | Single-engine land; Single-engine sea   | 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:             |                |
| Medical Certification:    | BasicMed Without waivers/limitations  | Last FAA Medical Exam:            | August 1, 2022 |
| Occupational Pilot:       | No  | Last Flight Review or Equivalent: | June 22, 2021  |
| Flight Time:              | (Estimated) 883.1 hours (Total, all aircraft), 883.1 hours (Pilot In Command, all aircraft), 8.6 hours (Last 30 days, all aircraft) |                                   |                |

### Aircraft and Owner/Operator Information

|                               |                             |                                |                 |
|-------------------------------|-----------------------------|--------------------------------|-----------------|
| Aircraft Make:                | Piper                       | Registration:                  | N83330          |
| Model/Series:                 | PA-18-150                   | Aircraft Category:             | Airplane        |
| Year of Manufacture:          | 1976                        | Amateur Built:                 |                 |
| Airworthiness Certificate:    | Normal                      | Serial Number:                 | 18-7609080      |
| Landing Gear Type:            | Tailwheel                   | Seats:                         | 2               |
| Date/Type of Last Inspection: | July 12, 2022 Annual        | Certified Max Gross Wt.:       |                 |
| Time Since Last Inspection:   |                             | Engines:                       | 1 Reciprocating |
| Airframe Total Time:          | 435 Hrs at time of accident | Engine Manufacturer:           | LYCOMING        |
| ELT:                          | Installed, not activated    | Engine Model/Series:           | O-360           |
| Registered Owner:             | On file                     | Rated Power:                   | 180 Horsepower  |
| Operator:                     | On file                     | Operating Certificate(s) Held: | 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> | PANC,132 ft msl                  | <b>Distance from Accident Site:</b>             | 20 Nautical Miles |
| <b>Observation Time:</b>                | 10:53 Local                      | <b>Direction from Accident Site:</b>            | 135°              |
| <b>Lowest Cloud Condition:</b>          | Few / 4000 ft AGL                | <b>Visibility</b>                               | 10 miles          |
| <b>Lowest Ceiling:</b>                  | Broken / 7000 ft AGL             | <b>Visibility (RVR):</b>                        |                   |
| <b>Wind Speed/Gusts:</b>                | 6 knots /                        | <b>Turbulence Type<br/>Forecast/Actual:</b>     | None / None       |
| <b>Wind Direction:</b>                  | 330°                             | <b>Turbulence Severity<br/>Forecast/Actual:</b> | N/A / N/A         |
| <b>Altimeter Setting:</b>               | 30.22 inches Hg                  | <b>Temperature/Dew Point:</b>                   | 12°C / 6°C        |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |                   |
| <b>Departure Point:</b>                 | Wasilla, AK (AK89)               | <b>Type of Flight Plan Filed:</b>               | None              |
| <b>Destination:</b>                     | Anchorage, AK                    | <b>Type of Clearance:</b>                       | None              |
| <b>Departure Time:</b>                  | 10:20 Local                      | <b>Type of Airspace:</b>                        | Class G           |

## Wreckage and Impact Information

|                                |        |                                 |                  |
|--------------------------------|--------|---------------------------------|------------------|
| <b>Crew Injuries:</b>          | 1 None | <b>Aircraft Damage:</b>         | Substantial      |
| <b>Passenger<br/>Injuries:</b> |        | <b>Aircraft Fire:</b>           | None             |
| <b>Ground Injuries:</b>        |        | <b>Aircraft Explosion:</b>      | None             |
| <b>Total Injuries:</b>         | 1 None | <b>Latitude,<br/>Longitude:</b> | 61.3,-150.6(est) |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Gutierrez, Eric   |
| <b>Additional Participating Persons:</b> | Luis E. Trujillo-Martinez; Federal Aviation Administration; Anchorage , AK                              |
| <b>Original Publish Date:</b>            | August 31, 2023   |
| <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=192329">https://data.nts.gov/Docket?ProjectID=192329</a> |

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](#).