



# **Aviation Investigation Final Report**

| Location:               | Cordova, Alaska                      | Accident Number:      | ANC23LA069  |
|-------------------------|--------------------------------------|-----------------------|-------------|
| Date & Time:            | September 2, 2023, 20:10 Local       | <b>Registration</b> : | N723AK      |
| Aircraft:               | Bellanca 8GCBC                       | Aircraft Damage:      | Substantial |
| Defining Event:         | Aerodynamic stall/spin               | Injuries:             | 2 None      |
| Flight Conducted Under: | Part 91: General aviation - Personal |                       |             |
|                         |                                      |                       |             |

# Analysis

The pilot reported that during landing, the airplane stalled about 5 to 10 feet above the ground and bounced off the runway surface. He applied full power and removed carburetor heat to perform a go-around procedure. The airplane impacted a berm adjacent to the runway and the airplane sustained substantial damage to the wings. 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 exceedance of the airplane's critical angle of attack during landing, which resulted in an aerodynamic stall and loss of airplane control.

# Findings

| Personnel issues | Aircraft control - Pilot              |
|------------------|---------------------------------------|
| Aircraft         | Angle of attack - Capability exceeded |
| Personnel issues | Identification/recognition - Pilot    |
| Personnel issues | Decision making/judgment - Pilot      |

# **Factual Information**

# History of Flight

| Landing-flare/touchdown            | Aerodynamic stall/spin (Defining event) |
|------------------------------------|---|
| Landing-aborted after<br>touchdown | Collision with terr/obj (non-CFIT)      |

#### **Pilot Information**

| Certificate:              | Commercial   | Age:                              | 56,Male     |
|---------------------------|--|-----------------------------------|-------------|
| Airplane Rating(s):       | Single-engine land; Single-engine<br>sea   | Seat Occupied:                    | Front       |
| Other Aircraft Rating(s): | None   | Restraint Used:                   | 4-point     |
| Instrument Rating(s):     | Airplane   | Second Pilot Present:             | No          |
| Instructor Rating(s):     | None   | Toxicology Performed:             |             |
| Medical Certification:    | BasicMed None  | Last FAA Medical Exam:            | May 4, 2022 |
| Occupational Pilot:       | No   | Last Flight Review or Equivalent: |             |
| Flight Time:              | 865 hours (Total, all aircraft), 382 hours (Total, this make and model), 788 hours (Pilot In<br>Command, all aircraft), 4 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1<br>hours (Last 24 hours, all aircraft) |                                   |             |

#### **Passenger Information**

| Certificate:              |     | Age:                              | Male    |
|---------------------------|-----|-----------------------------------|---------|
| Airplane Rating(s):       |     | Seat Occupied:                    | Rear    |
| Other Aircraft Rating(s): |     | Restraint Used:                   | Unknown |
| Instrument Rating(s):     |     | Second Pilot Present:             | No      |
| Instructor Rating(s):     |     | Toxicology Performed:             |         |
| Medical Certification:    |     | Last FAA Medical Exam:            |         |
| Occupational Pilot:       | UNK | Last Flight Review or Equivalent: |         |
| Flight Time:              |     |                                   |         |

#### Aircraft and Owner/Operator Information

| Aircraft Make:                   | Bellanca  | Registration:                     | N723AK          |
|----------------------------------|---|-----------------------------------|-----------------|
| Model/Series:                    | 8GCBC   | Aircraft Category:                | Airplane        |
| Year of Manufacture:             | 1974  | Amateur Built:                    |                 |
| Airworthiness Certificate:       | Normal  | Serial Number:                    | 76-74           |
| Landing Gear Type:               | Tailwheel   | Seats:                            | 2               |
| Date/Type of Last<br>Inspection: | February 19, 2023 Annual                                    | Certified Max Gross Wt.:          | 2150 lbs        |
| Time Since Last Inspection:      | 4.7 Hrs   | Engines:                          | 1 Reciprocating |
| Airframe Total Time:             | 1733.4 Hrs at time of accident                              | Engine Manufacturer:              | LYCOMING        |
| ELT:                             | C126 installed, activated, did not aid in locating accident | Engine Model/Series:              | 0-360 C2E       |
| Registered Owner:                | On file   | Rated Power:                      | 180 Horsepower  |
| Operator:                        | On file   | Operating Certificate(s)<br>Held: | None            |

# Meteorological Information and Flight Plan

| Conditions at Accident Site:     | Visual (VMC)                 | Condition of Light:                     | Dusk             |
|----------------------------------|------------------------------|---|------------------|
| Observation Facility, Elevation: | PACV,48 ft msl               | Distance from Accident Site:            | 1 Nautical Miles |
| Observation Time:                | 20:53 Local                  | Direction from Accident Site:           | 112°             |
| Lowest Cloud Condition:          | Clear                        | Visibility                              | 10 miles         |
| Lowest Ceiling:                  | None                         | Visibility (RVR):                       |                  |
| Wind Speed/Gusts:                | /                            | Turbulence Type<br>Forecast/Actual:     | /                |
| Wind Direction:                  |                              | Turbulence Severity<br>Forecast/Actual: | /                |
| Altimeter Setting:               | 29.97 inches Hg              | Temperature/Dew Point:                  | 10°C / 8°C       |
| Precipitation and Obscuration:   | No Obscuration; No Precipita | ation                                   |                  |
| Departure Point:                 | Cordova, AK                  | Type of Flight Plan Filed:              | None             |
| Destination:                     | Cordova, AK                  | Type of Clearance:                      | None             |
| Departure Time:                  |                              | Type of Airspace:                       | Class E          |

#### **Airport Information**

| Airport:             | Merle K Smith Airport CDV | Runway Surface Type:      | Asphalt         |
|----------------------|---------------------------|---------------------------|-----------------|
| Airport Elevation:   | 53 ft msl                 | Runway Surface Condition: | Dry             |
| Runway Used:         | 09                        | IFR Approach:             | None            |
| Runway Length/Width: | 7500 ft / 150 ft          | VFR Approach/Landing:     | Traffic pattern |

# Wreckage and Impact Information

| Crew Injuries:         | 1 None | Aircraft Damage:        | Substantial          |
|------------------------|--------|-------------------------|----------------------|
| Passenger<br>Injuries: | 1 None | Aircraft Fire:          | None                 |
| Ground Injuries:       |        | Aircraft Explosion:     | None                 |
| Total Injuries:        | 2 None | Latitude,<br>Longitude: | 60.494294,-145.48603 |

#### **Administrative Information**

| Investigator In Charge (IIC):        | Ward, Mark   |
|--------------------------------------|--|
| Additional Participating<br>Persons: | Dwyane Edwards ; FAA                                   |
| Original Publish Date:               | April 4, 2024  |
| Last Revision Date:                  |  |
| Investigation Class:                 | Class 4  |
| Note:                                | The NTSB did not travel to the scene of this accident. |
| Investigation Docket:                | https://data.ntsb.gov/Docket?ProjectID=192991          |

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 <u>here</u>.