



# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Dixon, California                    | <b>Accident Number:</b> | WPR23LA312  |
| <b>Date &amp; Time:</b>        | August 9, 2023, 16:15 Local          | <b>Registration:</b>    | N50443      |
| <b>Aircraft:</b>               | Bellanca 7GCBC                       | <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 91: General aviation - Personal |                         |             |

## Analysis

The pilot of the tailwheel-equipped airplane reported that while conducting a pleasure flight he elected to land on an unimproved dirt airstrip. During the landing roll, the right main landing gear struck an unidentified object/hole which pulled the airplane to the right off the landing surface and toward a fence line. The pilot applied excessive braking, and the airplane nosed over and came to rest inverted. The airplane sustained substantial damage to the left-wing strut and the top of the vertical stabilizer 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 loss of directional control after striking an unidentified object during landing on an unimproved runway, and his subsequent use of excessive braking that resulted in a nose-over.

## Findings

|                             |  |
|-----------------------------|--|
| <b>Personnel issues</b>     | Use of equip/system - Pilot                        |
| <b>Aircraft</b>             | Brake - Incorrect use/operation                    |
| <b>Aircraft</b>             | Directional control - Attain/maintain not possible |
| <b>Environmental issues</b> | Soft surface - Effect on operation                 |

## Factual Information

### History of Flight

|                      |  |
|----------------------|--|
| Landing-landing roll | Loss of control on ground (Defining event) |
| Landing-landing roll | Nose over/nose down                        |

### Pilot Information

|                           |  |                                   |                   |
|---------------------------|--|-----------------------------------|-------------------|
| Certificate:              | Commercial; Flight instructor  | Age:                              | 61,Male           |
| Airplane Rating(s):       | Single-engine land; Multi-engine land  | Seat Occupied:                    | Front             |
| Other Aircraft Rating(s): | Helicopter   | Restraint Used:                   | 4-point           |
| Instrument Rating(s):     | Airplane   | Second Pilot Present:             | Yes               |
| Instructor Rating(s):     | Airplane single-engine; Instrument airplane  | Toxicology Performed:             |                   |
| Medical Certification:    | Class 1 With waivers/limitations   | Last FAA Medical Exam:            | November 28, 2022 |
| Occupational Pilot:       | Yes  | Last Flight Review or Equivalent: | October 1, 2022   |
| Flight Time:              | (Estimated) 3891 hours (Total, all aircraft), 117 hours (Total, this make and model), 3355 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft) |                                   |                   |

### Pilot-rated passenger Information

|                           |  |                                   |                  |
|---------------------------|--|-----------------------------------|------------------|
| Certificate:              | Commercial   | Age:                              | 70,Male          |
| Airplane Rating(s):       | Single-engine land; Single-engine sea; Multi-engine land   | Seat Occupied:                    | Rear             |
| Other Aircraft Rating(s): | Glider; Helicopter   | Restraint Used:                   | 4-point          |
| Instrument Rating(s):     | Airplane   | Second Pilot Present:             | Yes              |
| Instructor Rating(s):     | Helicopter   | Toxicology Performed:             |                  |
| Medical Certification:    | Class 2 With waivers/limitations   | Last FAA Medical Exam:            | October 11, 2022 |
| Occupational Pilot:       | No   | Last Flight Review or Equivalent: | October 11, 2022 |
| Flight Time:              | (Estimated) 36700 hours (Total, all aircraft), 4500 hours (Total, this make and model), 36700 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft) |                                   |                  |

## Aircraft and Owner/Operator Information

|                                      |  |                                       |                 |
|--------------------------------------|--|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | Bellanca   | <b>Registration:</b>                  | N50443          |
| <b>Model/Series:</b>                 | 7GCBC  | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          | 1979   | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Aerobatic; Normal  | <b>Serial Number:</b>                 | 1128-79         |
| <b>Landing Gear Type:</b>            | Tailwheel  | <b>Seats:</b>                         | 2               |
| <b>Date/Type of Last Inspection:</b> | March 17, 2023 Annual                                      | <b>Certified Max Gross Wt.:</b>       |                 |
| <b>Time Since Last Inspection:</b>   |  | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 13546.08 Hrs at time of accident                           | <b>Engine Manufacturer:</b>           | Lycoming        |
| <b>ELT:</b>                          | C91 installed, activated, did not aid in locating accident | <b>Engine Model/Series:</b>           | O-320-A2B       |
| <b>Registered Owner:</b>             | On file  | <b>Rated Power:</b>                   | 150 Horsepower  |
| <b>Operator:</b>                     | On file  | <b>Operating Certificate(s) Held:</b> | 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> | KSUU, 62 ft msl                  | <b>Distance from Accident Site:</b>         | 7 Nautical Miles |
| <b>Observation Time:</b>                | 15:55 Local                      | <b>Direction from Accident Site:</b>        | 303°             |
| <b>Lowest Cloud Condition:</b>          | Clear                            | <b>Visibility</b>                           | 10 miles         |
| <b>Lowest Ceiling:</b>                  | None                             | <b>Visibility (RVR):</b>                    |                  |
| <b>Wind Speed/Gusts:</b>                | 13 knots /                       | <b>Turbulence Type Forecast/Actual:</b>     | None / None      |
| <b>Wind Direction:</b>                  | 240°                             | <b>Turbulence Severity Forecast/Actual:</b> | N/A / N/A        |
| <b>Altimeter Setting:</b>               | 29.84 inches Hg                  | <b>Temperature/Dew Point:</b>               | 30°C / 12°C      |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |                  |
| <b>Departure Point:</b>                 | Vacaville, CA (VCB)              | <b>Type of Flight Plan Filed:</b>           | None             |
| <b>Destination:</b>                     | Vacaville, CA (VCB)              | <b>Type of Clearance:</b>                   | None             |
| <b>Departure Time:</b>                  |                                  | <b>Type of Airspace:</b>                    | Class G          |

## Airport Information

|                             |           |                                  |                |
|-----------------------------|-----------|----------------------------------|----------------|
| <b>Airport:</b>             | NA NA     | <b>Runway Surface Type:</b>      |                |
| <b>Airport Elevation:</b>   | 40 ft msl | <b>Runway Surface Condition:</b> | Holes;Rough    |
| <b>Runway Used:</b>         |           | <b>IFR Approach:</b>             | None           |
| <b>Runway Length/Width:</b> |           | <b>VFR Approach/Landing:</b>     | Forced landing |

## Wreckage and Impact Information

|                            |        |                             |                           |
|----------------------------|--------|-----------------------------|---------------------------|
| <b>Crew Injuries:</b>      | N/A    | <b>Aircraft Damage:</b>     | Substantial               |
| <b>Passenger Injuries:</b> | 1 None | <b>Aircraft Fire:</b>       | None                      |
| <b>Ground Injuries:</b>    |        | <b>Aircraft Explosion:</b>  | None                      |
| <b>Total Injuries:</b>     | 1 None | <b>Latitude, Longitude:</b> | 38.201636,-121.80603(est) |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Cornejo, Tealeye  |
| <b>Additional Participating Persons:</b> | Dana McIlwain; Federal Aviation Administration; Sacramento, CA  |
| <b>Original Publish Date:</b>            | November 30, 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=192866">https://data.nts.gov/Docket?ProjectID=192866</a> |

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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](#).