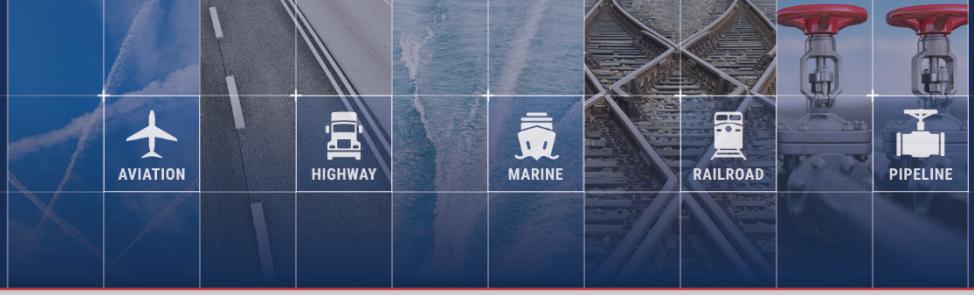


# Aviation Investigation Final Report

| | | | |
|---|---|---|---|
| **Location:** | Baker City, Oregon | **Accident Number:** | SEA04LA100 |
| **Date & Time:** | June 5, 2004, 17:40 Local | **Registration:** | N711LN |
| **Aircraft:** | Gann Glasair II-S RG | **Aircraft Damage:** | Destroyed |
| **Defining Event:** | | **Injuries:** | 1 Fatal |
| **Flight Conducted Under:** | Part 91: General aviation - Personal | | |

## Analysis

While cruising at 14,000 feet, the pilot requested a climb to 17,000 feet. Just after being cleared to climb to that altitude, the pilot advised Center that he was experiencing light to moderate airframe icing. He continued on course to 17,000 feet, and about five minutes after receiving the climb clearance he transmitted that he was in a bad spin. One minute and 20 seconds later the aircraft passed through 5,200 feet, and ten seconds later was lost from radar at an undetermined altitude. The pilot made two other transmissions during the uncontrolled descent, during both of which he stated that he was in a bad left spin. Federal Aviation Administration records indicate that the air mass that the pilot was flying through was moist and unstable. Numerous AIRMETS were in effect for the general area in which the flight was taking place.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate in-flight planning/decision and his failure to maintain an airspeed above stall speed (Vs) after encountering airframe icing during cruise flight. Factors include the pilot's intentional continuation of his flight along the planned route after encountering icing conditions.

## Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: CRUISE

Findings
1. (F) WEATHER CONDITION - ICING CONDITIONS
2. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
3. (F) FLIGHT INTO ADVERSE WEATHER - INTENTIONAL - PILOT IN COMMAND
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CRUISE

Findings
4. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
5. STALL/SPIN - INADVERTENT - PILOT IN COMMAND
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
6. TERRAIN CONDITION - MOUNTAINOUS/HILLY

## Factual Information

On Saturday, June 5, 2004, approximately 1740 Pacific daylight time, an experimental Gann Glasair II-S RG, N711LN, impacted the terrain about 40 miles southeast of Baker City, Oregon. The private pilot, who was the sole occupant, received fatal injuries, and the aircraft, which was owned and operated by the pilot, was destroyed. The 14 CFR Part 91 personal pleasure flight, which departed Portland International Airport, Portland, Oregon, at 1600, had reportedly entered an area conducive to airframe icing prior to the accident. The pilot had filed and activated an IFR flight plan for the flight to Vance Brand Airport, Longmont, Colorado. There was no report of an ELT activation.

A review of the recorded radio transmissions between the Salt Lake City Air Traffic Control Center and the pilot of N711LN revealed that about one hour and thirty minutes after takeoff, while cruising at 14,000 feet, the pilot requested a climb to 17,000 feet. Upon being cleared to that altitude, the pilot advised Center that he was experiencing light to moderate icing. About five minutes after being cleared to 17,000 feet, the pilot began a transmission with an expletive, and then stated "Mayday, 711LN in a bad spin." About 15 seconds later there was another transmission from the pilot, but his words were not intelligible, except for the aircraft call sign. Immediately after that transmission, the controller asked the pilot if he was calling Center, and the pilot transmitted, "Yeah, Mayday, we're in a bad spin to the left." After about 10 more seconds, the controller again asked if N711LN was calling Center, and the pilot responded with, "Yeah, think we're going to crash, in a real bad left spin here." About 10 seconds later, the controller transmitted, "N1LN," and the pilot responded with "Yeah, 71LN." At that point the controller transmitted that N711LN was "broken and unreadable," and then gave the pilot the current altimeter for Baker, Oregon. Although the controller attempted further contact with the aircraft, there was no further response, and radar contact was lost at 1737. The wreckage was located about five hours later at geographic coordinates 44 degrees, 14.28 minutes North, 117 degrees, 36.14 minutes West.

A post accident review of recorded radar data showed that N711LN's first significant departure from the cruise altitude of 17,000 feet occurred at 17:39:20. At 17:39;25 the aircraft was passing through 16,300 feet, and 20 seconds later (17:39:45) was descending through 14,100 feet. The aircraft descended below 10,000 feet approximately 20 seconds after passing 14,100 feet, and was down to 5,200 feet by 17:40:42. One minute and 30 seconds after departing cruise flight at 17,000 feet, the aircraft was lost from radar at an undetermined altitude.

According to Federal Aviation Administration records, the pilot called the McMinnville Automated Flight Service Station twice on the day of this flight. During the first call, which began at 1341, the pilot received a full weather briefing related to the current and expected conditions along his route of flight. As part of that briefing, he was advised that the air mass that he would be flying through during the first part of his flight was moving in from the west,

and was moist and slightly unstable. He was also advised that there were a number of Airmen's Meteorological Information Notices (AIRMETS) in effect across Oregon that were associated with this air mass. The briefer also advised the pilot that once he got east of Baker City that it was expected to be clear at an altitude below 12,000 feet, and that thunderstorms where developing in parts of southern Idaho. At the conclusion of that briefing, the pilot filed his IFR flight plan, with an ultimate cruising altitude of 14,000 feet. At 1531, the pilot called the flight service station again in order to make a change in his time of departure. During that interaction with the briefer, he was advised that there was mountain obscurement and turbulence along most of his route.

A toxicological examination performed by the FAA's Bioaeronautical Science Research Laboratory determined that there was no carbon monoxide in the pilot's blood, and that there was no ethanol in the pilot's brain or muscle. It was also determined that there were no disqualifying drugs in the pilot's liver.

## Pilot Information

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|---|---|---|---|
| **Certificate:** | Private | **Age:** | 61,Male |
| **Airplane Rating(s):** | Single-engine land | **Seat Occupied:** | Left |
| **Other Aircraft Rating(s):** | None | **Restraint Used:** | |
| **Instrument Rating(s):** | Airplane | **Second Pilot Present:** | No |
| **Instructor Rating(s):** | None | **Toxicology Performed:** | Yes |
| **Medical Certification:** | Class 3 Valid Medical--w/ waivers/lim | **Last FAA Medical Exam:** | June 26, 2003 |
| **Occupational Pilot:** | UNK | **Last Flight Review or Equivalent:** | |
| **Flight Time:** | 1600 hours (Total, all aircraft) | | |

## Aircraft and Owner/Operator Information

| | | | |
|---|---|---|---|
| **Aircraft Make:** | Gann | **Registration:** | N711LN |
| **Model/Series:** | Glasair II-S RG | **Aircraft Category:** | Airplane |
| **Year of Manufacture:** | | **Amateur Built:** | Yes |
| **Airworthiness Certificate:** | Experimental (Special) | **Serial Number:** | 2174 |
| **Landing Gear Type:** | Retractable - Tricycle | **Seats:** | 2 |
| **Date/Type of Last Inspection:** | Condition | **Certified Max Gross Wt.:** | 2100 lbs |
| **Time Since Last Inspection:** | | **Engines:** | 1 Reciprocating |
| **Airframe Total Time:** | | **Engine Manufacturer:** | Lycoming |
| **ELT:** | | **Engine Model/Series:** | IO-360 |
| **Registered Owner:** | Richard J. Gann | **Rated Power:** | 200 Horsepower |
| **Operator:** | | **Operating Certificate(s) Held:** | None |

## Meteorological Information and Flight Plan

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|---|---|---|---|
| **Conditions at Accident Site:** | Instrument (IMC) | **Condition of Light:** | Day |
| **Observation Facility, Elevation:** | KBKE,3375 ft msl | **Distance from Accident Site:** | 35 Nautical Miles |
| **Observation Time:** | 17:53 Local | **Direction from Accident Site:** | 320° |
| **Lowest Cloud Condition:** | Few / 10000 ft AGL | **Visibility** | 10 miles |
| **Lowest Ceiling:** | None | **Visibility (RVR):** | |
| **Wind Speed/Gusts:** | 17 knots / | **Turbulence Type Forecast/Actual:** | / |
| **Wind Direction:** | 350° | **Turbulence Severity Forecast/Actual:** | / |
| **Altimeter Setting:** | 29.85 inches Hg | **Temperature/Dew Point:** | 20°C / 10°C |
| **Precipitation and Obscuration:** | No Obscuration; No Precipitation | | |
| **Departure Point:** | Portland, OR (PDX ) | **Type of Flight Plan Filed:** | IFR |
| **Destination:** | Longmont, CO (2V2 ) | **Type of Clearance:** | IFR |
| **Departure Time:** | 16:00 Local | **Type of Airspace:** | Class E |

## Wreckage and Impact Information

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|---|---|---|---|
| **Crew Injuries:** | 1 Fatal | **Aircraft Damage:** | Destroyed |
| **Passenger Injuries:** | | **Aircraft Fire:** | On-ground |
| **Ground Injuries:** | N/A | **Aircraft Explosion:** | None |
| **Total Injuries:** | 1 Fatal | **Latitude, Longitude:** | 44.238056,-117.602218 |

## Administrative Information

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|---|---|
| **Investigator In Charge (IIC):** | Anderson, Orrin |
| **Additional Participating Persons:** | Lewis  Sanders; Bosie FSDO; Boise, ID |
| **Original Publish Date:** | December 3, 2004 |
| **Last Revision Date:** | |
| **Investigation Class:** | Class |
| **Note:** | |
| **Investigation Docket:** | https://data.ntsb.gov/Docket?ProjectID=59389 |