



# Aviation Investigation Final Report

|                                |                          |                         |             |
|--------------------------------|--------------------------|-------------------------|-------------|
| <b>Location:</b>               | BERINO, New Mexico       | <b>Accident Number:</b> | DEN86LA130  |
| <b>Date &amp; Time:</b>        | May 9, 1986, 08:30 Local | <b>Registration:</b>    | N4491Q      |
| <b>Aircraft:</b>               | CESSNA A188B             | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         |                          | <b>Injuries:</b>        | 1 None      |
| <b>Flight Conducted Under:</b> | Part 137: Agricultural   |                         |             |

## Analysis

THE PILOT REPORTS THAT HE WAS TAKING OFF ON HIS THIRD AERIAL APP FLT OF THE DAY. HE SAID THE WIND WAS FROM THE NW AND VERY LIGHT AND HE WAS DEPARTING TO THE N. THE DENSITY ALT WAS CALCULATED TO BE 5,200 FT. ACCELERATION SEEMED TO BE NORMAL UNTIL ABOUT TWO THIRDS OF THE WAY DOWN THE 2,400 FT LONG, DIRT STRIP WHEN 'THE PLANE SEEMED LIKE IT SUDDENLY PICKED UP A TAIL WIND.' THE PLT DUMPED THE LOAD OF CHEM IN HOPES OF GETTING AIRBORNE BUT THE ACFT DID NOT FLY. THERE IS A TWO FT HIGH LEVY AT THE END OF THE STRIP AND WHEN THE MAIN GEAR HIT THE LEVY THE ACFT BOUNCED AIRBORNE AND THEN CRASHED. THE ENG WAS EXAMINED AFTER THE ACDT AND NO EVIDENCE WAS FOUND TO EXPLAIN THE REPORTED POWER LOSS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

### Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL  
Phase of Operation: TAKEOFF - ROLL/RUN

#### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

2. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT
3. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE

## Factual Information

### Pilot Information

|                                  |  |  |                 |
|----------------------------------|--|--|-----------------|
| <b>Certificate:</b>              | Commercial   | <b>Age:</b>                              | 34, Male        |
| <b>Airplane Rating(s):</b>       | Single-engine land   | <b>Seat Occupied:</b>                    | Unknown         |
| <b>Other Aircraft Rating(s):</b> | None   | <b>Restraint Used:</b>                   |                 |
| <b>Instrument Rating(s):</b>     | None   | <b>Second Pilot Present:</b>             | No              |
| <b>Instructor Rating(s):</b>     | None   | <b>Toxicology Performed:</b>             | No              |
| <b>Medical Certification:</b>    | Class 2 Valid Medical--no waivers/lim.   | <b>Last FAA Medical Exam:</b>            | October 8, 1986 |
| <b>Occupational Pilot:</b>       | Yes  | <b>Last Flight Review or Equivalent:</b> |                 |
| <b>Flight Time:</b>              | 3777 hours (Total, all aircraft), 562 hours (Total, this make and model), 3581 hours (Pilot In Command, all aircraft), 133 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft) |  |                 |

### Aircraft and Owner/Operator Information

|                                      |                          |                                       |                 |
|--------------------------------------|--------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | CESSNA                   | <b>Registration:</b>                  | N4491Q          |
| <b>Model/Series:</b>                 | A188B A188B              | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |                          | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Restricted (Special)     | <b>Serial Number:</b>                 | 18800891        |
| <b>Landing Gear Type:</b>            | Tailwheel                | <b>Seats:</b>                         | 1               |
| <b>Date/Type of Last Inspection:</b> | February 18, 1986 Annual | <b>Certified Max Gross Wt.:</b>       | 3300 lbs        |
| <b>Time Since Last Inspection:</b>   | 72 Hrs                   | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 3827 Hrs                 | <b>Engine Manufacturer:</b>           | CONTINENTAL     |
| <b>ELT:</b>                          | Not installed            | <b>Engine Model/Series:</b>           | IO-520-D9       |
| <b>Registered Owner:</b>             | RIO AG AIR, INC.         | <b>Rated Power:</b>                   | 300 Horsepower  |
| <b>Operator:</b>                     |                          | <b>Operating Certificate(s) Held:</b> |                 |
| <b>Operator Does Business As:</b>    |                          | <b>Operator Designator Code:</b>      |                 |

## Meteorological Information and Flight Plan

|   |                                  |   |          |
|---|----------------------------------|---|----------|
| <b>Conditions at Accident Site:</b>     | Visual (VMC)                     | <b>Condition of Light:</b>                  | Day      |
| <b>Observation Facility, Elevation:</b> |                                  | <b>Distance from Accident Site:</b>         |          |
| <b>Observation Time:</b>                |                                  | <b>Direction from Accident Site:</b>        |          |
| <b>Lowest Cloud Condition:</b>          | Clear                            | <b>Visibility</b>                           | 20 miles |
| <b>Lowest Ceiling:</b>                  | None                             | <b>Visibility (RVR):</b>                    |          |
| <b>Wind Speed/Gusts:</b>                | 1 knots /                        | <b>Turbulence Type Forecast/Actual:</b>     | /        |
| <b>Wind Direction:</b>                  | 320°                             | <b>Turbulence Severity Forecast/Actual:</b> | /        |
| <b>Altimeter Setting:</b>               |                                  | <b>Temperature/Dew Point:</b>               | 20°C     |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |          |
| <b>Departure Point:</b>                 |                                  | <b>Type of Flight Plan Filed:</b>           | None     |
| <b>Destination:</b>                     |                                  | <b>Type of Clearance:</b>                   | None     |
| <b>Departure Time:</b>                  | 08:30 Local                      | <b>Type of Airspace:</b>                    | Class G  |

## Airport Information

|                             |             |                                  |      |
|-----------------------------|-------------|----------------------------------|------|
| <b>Airport:</b>             |             | <b>Runway Surface Type:</b>      | Dirt |
| <b>Airport Elevation:</b>   | 3800 ft msl | <b>Runway Surface Condition:</b> | Dry  |
| <b>Runway Used:</b>         | 36          | <b>IFR Approach:</b>             | None |
| <b>Runway Length/Width:</b> | 2400 ft     | <b>VFR Approach/Landing:</b>     | None |

## Wreckage and Impact Information

|                            |        |                             |                            |
|----------------------------|--------|-----------------------------|----------------------------|
| <b>Crew Injuries:</b>      | 1 None | <b>Aircraft Damage:</b>     | Substantial                |
| <b>Passenger Injuries:</b> |        | <b>Aircraft Fire:</b>       | None                       |
| <b>Ground Injuries:</b>    | N/A    | <b>Aircraft Explosion:</b>  | None                       |
| <b>Total Injuries:</b>     | 1 None | <b>Latitude, Longitude:</b> | 32.069152,-106.639282(est) |

## Administrative Information

**Investigator In Charge (IIC):** Johnson, R

**Additional Participating Persons:** G NICKERSON; ALBUQUERQUE , NM

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=16959>

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