



Aviation Investigation Final Report

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|--------------------------------|----------------------------|-------------------------|-------------|
| Location: | FARMINGTON, California | Accident Number: | LAX91LA128 |
| Date & Time: | March 9, 1991, 16:30 Local | Registration: | N59403 |
| Aircraft: | BELL 47G-5A | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 None |
| Flight Conducted Under: | Part 137: Agricultural | | |

Analysis

THE ENGINE POWER REDUCED DURING A PROCEDURE TURNAROUND AS THE AIRCRAFT WAS DISPENSING LIQUID FERTILIZER. THE HELICOPTER SETTLED INTO SOFT TERRAIN AND THE MAIN ROTOR BLADE SEVERED THE TAIL BOOM. THE HELICOPTER THEN IMPACTED THE GROUND. EXAMINATION OF THE ENGINE'S AIR FILTER DISCLOSED EVIDENCE OF LIQUID FERTILIZER CLOGGING THE FILTER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE CONTAMINATION OF THE ENGINE INDUCTION AIR FILTER. SOFT TERRAIN DURING THE TOUCHDOWN WAS A FACTOR IN THE ACCIDENT.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings

1. (C) INDUCTION AIR CONTROL,AIR FILTER/SCREEN - CONTAMINATION

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. (F) TERRAIN CONDITION - SOFT

Factual Information

Pilot Information

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|----------------------------------|--|--|-------------------|
| Certificate: | Commercial | Age: | 45, Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Unknown |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medical--no waivers/lim. | Last FAA Medical Exam: | November 27, 1990 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | |
| Flight Time: | 10000 hours (Total, all aircraft), 10000 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|-------------------------|---------------------------------------|-----------------|
| Aircraft Make: | BELL | Registration: | N59403 |
| Model/Series: | 47G-5A 47G-5A | Aircraft Category: | Helicopter |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Restricted (Special) | Serial Number: | 25140 |
| Landing Gear Type: | Skid | Seats: | 3 |
| Date/Type of Last Inspection: | January 2, 2000 Unknown | Certified Max Gross Wt.: | 2850 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | LYCOMING |
| ELT: | Not installed | Engine Model/Series: | VO-435-81A |
| Registered Owner: | | Rated Power: | 220 Horsepower |
| Operator: | AG-AIR, INC. | Operating Certificate(s) Held: | |
| Operator Does Business As: | | Operator Designator Code: | JYWG |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|---------------|
| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | | Distance from Accident Site: | |
| Observation Time: | | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 0° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | | Temperature/Dew Point: | -18°C / -18°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 00:00 Local | Type of Airspace: | |

Airport Information

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|-----------------------------|---|----------------------------------|----------------|
| Airport: | | Runway Surface Type: | Dirt |
| Airport Elevation: | | Runway Surface Condition: | Dry |
| Runway Used: | 0 | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | Forced landing |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|----------------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | 37.960483,-120.870277(est) |

Administrative Information

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| Investigator In Charge (IIC): | Wall, James |
| Additional Participating Persons: | LAURI AQUINO; OAKLAND , CA |
| Original Publish Date: | March 31, 1993 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=27136 |

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