



National Transportation Safety Board Aviation Accident Final Report

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| Location: | DODGE CITY, KS | Accident Number: | MKC87LA072 |
| Date & Time: | 04/01/1987, 1225 CST | Registration: | N48564 |
| Aircraft: | GRUMMAN-SCHWEIZER G-164A | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 None |
| Flight Conducted Under: | Part 137: Agricultural | | |

Analysis

THE PILOT STATED THAT THE AIRCRAFT WAS OPERATING NORMALLY WHEN HE ESTABLISHED HIMSELF ON FINAL APPROACH FOR RWY 32. WINDS WERE FROM THE NORTHEAST AT 25 KTS, THE PILOT FURTHER STATED, SO HE ABANDONED THE APPROACH AND WAS IN THE PROCESS OF CIRCLING THE FIELD FOR A LANDING ON RWY 02 WHEN THE ENGINE BEGAN LOSING POWER. ACCORDING TO A MECHANIC-WITNESS ON THE GROUND, THE AIRCRAFT'S ENGINE 'SOUNDED BAD--LIKE A BLOWER FAILURE', AS IT FLEW OVER THE HANGAR WHILE CIRCLING FOR ANOTHER APPROACH. AT THIS POINT, THE WITNESS FURTHER STATED, THE ENGINE BEGAN BELCHING SMOKE AND TOTALLY LOST POWER. THE PILOT ATTEMPTED A RETURN TO THE FIELD BUT HE RAN OUT OF ALTITUDE--AND WAS FORCED TO LAND IN A FIELD ADJACENT TO THE AIRPORT. THE AIRCRAFT BOUNCED UPON TOUCHDOWN, THEN NOSED OVER. A POST-ACCIDENT EXAMINATION OF THE POWERPLANT REVEALED THAT A BLOWER BEARING HAD FAILED.

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(TOTAL) - MECH FAILURE/MALF
Phase of Operation: GO-AROUND (VFR)

Findings

1. (C) ENG ASSEMBLY,BLOWER/IMPELLER/INTEGRAL SUPERCHARGER - FAILURE,TOTAL
2. EMERGENCY PROCEDURE - INITIATED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

3. (F) WEATHER CONDITION - HIGH WIND

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

4. (C) TERRAIN CONDITION - ROUGH/UNEVEN
5. (F) WEATHER CONDITION - HIGH WIND

Factual Information

Pilot Information

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| Certificate: | Flight Instructor; Commercial | Age: | 34, Male |
| Airplane Rating(s): | Single-engine Land | Seat Occupied: | Unknown |
| Other Aircraft Rating(s): | None | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane Single-engine | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medical--w/ waivers/lim. | Last FAA Medical Exam: | 01/26/1987 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | |
| Flight Time: | 2234 hours (Total, all aircraft), 72 hours (Total, this make and model), 2073 hours (Pilot In Command, all aircraft), 72 hours (Last 90 days, all aircraft), 72 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|---------------------------------|---|-----------------|
| Aircraft Make: | GRUMMAN-SCHWEIZER | Registration: | N48564 |
| Model/Series: | G-164A G-164A | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Restricted | Serial Number: | 1675 |
| Landing Gear Type: | Tailwheel | Seats: | 1 |
| Date/Type of Last Inspection: | Unknown | Certified Max Gross Wt.: | 6075 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | P&W |
| ELT: | Not installed | Engine Model/Series: | R-1340-AN1 |
| Registered Owner: | ERHART AERIAL SPRAYING, INC. | Rated Power: | 600 hp |
| Operator: | ERHART AERIAL SPRAYING, INC. | Operating Certificate(s) Held: | |

Meteorological Information and Flight Plan

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| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | DDC, 2594 ft msl | Distance from Accident Site: | 8 Nautical Miles |
| Observation Time: | 1237 CST | Direction from Accident Site: | 40° |
| Lowest Cloud Condition: | Clear / 0 ft agl | Visibility | 20 Miles |
| Lowest Ceiling: | None / 0 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | 25 knots / 30 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 10° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 13° C / 3° C |
| Precipitation and Obscuration: | | | |
| Departure Point: | DODGE CITY, KS (DDC) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 1100 CST | Type of Airspace: | Class G |

Airport Information

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|----------------------|-----------------------|---------------------------|----------------|
| Airport: | DODGE CITY MUNI (DDC) | Runway Surface Type: | Grass/turf |
| Airport Elevation: | 0 ft | 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: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | |

Administrative Information

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|-----------------------------------|--|--------------|------------|
| Investigator In Charge (IIC): | RAMON E VARGAS | Report Date: | 11/29/1988 |
| Additional Participating Persons: | JERRY F TAYLOR; WICHITA, KS | | |
| Publish Date: | | | |
| Investigation Docket: | NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ . | | |

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).