



National Transportation Safety Board Aviation Accident Final Report

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|-------------------------|------------------------------|-------------------------|------------|
| Location: | OGDEN, UT | Accident Number: | DEN01LA109 |
| Date & Time: | 06/01/2001, 1208 MDT | Registration: | N5QV |
| Aircraft: | 2001 MCGIRL QUESTAIR VENTURE | Aircraft Damage: | Destroyed |
| Defining Event: | | Injuries: | 1 Serious |

Flight Conducted Under: Part 91: General Aviation - Flight Test

Analysis

While on a test flight, in a new homebuilt experimental airplane, a fuel leak into the cockpit occurred. The pilot declared an emergency, and during final approach to land, a fire developed in the cockpit. The pilot ground looped the airplane on the runway in front of the tower. Fixed base operator personnel extinguished the fire and removed the seriously injured pilot from the airplane. Due to thermal damage, the source of the fuel leak and subsequent fire was not found.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: an in-flight fire, which originated from a fuel leak of unknown origin.

Findings

Occurrence #1: FIRE
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) FUEL SYSTEM - LEAK
2. (C) FUEL SYSTEM - FIRE

Factual Information

On June 1, 2001, at 1208 mountain daylight time, an experimental homebuilt 2001 McGirl Questair Venture airplane, N5QV, was destroyed when it caught fire on short final to land at Ogden-Hinckley Airport, Ogden, Utah. The airline transport pilot and sole occupant received serious thermal injuries. The flight was operating under 14 CFR Part 91 and no flight plan was filed. Visual meteorological conditions prevailed.

The airplane was in a test status following construction and initial inspection by the Federal Aviation Administration (FAA). The airframe had accumulated 12 hours of total time in service.

According to the pilot, he had proceeded to the test area in the vicinity of Brigham City, Utah, and was at 10,500 feet above mean sea level (msl), when he noted some engine roughness. He said he considered landing at Brigham City, but by manipulating the mixture control he was able to smooth out the engine operation so he decided to return to Ogden. In his statement, the pilot said he was about 12 miles from Ogden when he noted a fuel leak which emanated from behind the glare shield and dripped on the cockpit floor and his right leg. The Ogden Air Traffic Control Tower was notified and the pilot set up for a straight in landing on runway 16. He lowered the landing gear when he was about 2 miles from the runway and shut off the main fuel tank.

The pilot said that on short final, or just after landing, the fuel ignited and he had fire in the cockpit. He said he released the canopy hold down and shut down the engine. When in front of the tower, he said he ground looped the airplane, but was unable to exit on his own due to his hands being burned.

According to the tower controller, the pilot was cleared to land the airplane on any runway after informing the tower he had fuel/fumes in the cockpit. Following a fast unstable landing on runway 16, the airplane reversed direction on the runway and stopped adjacent to the control tower with fire evident in and around the cockpit. Persons who worked for the fixed base operator (FBO) extinguished the fire and removed the pilot from the airplane.

Examination of the airplane provided evidence that the fire was more pronounced on the left and lower portion of the engine compartment and the left side of the cockpit. Due to the fire damage, the origin of the fuel leak and subsequent fire was not found.

Pilot Information

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|----------------------------------|--|--|----------------------------|
| Certificate: | Airline Transport; Commercial; Flight Engineer | Age: | 64, Male |
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Valid Medical--w/ waivers/lim. | Last FAA Medical Exam: | 09/28/2000 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | 08/28/2000 |
| Flight Time: | 32900 hours (Total, all aircraft), 52 hours (Total, this make and model), 29000 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|------------------------------|---------------------------------------|-----------------|
| Aircraft Make: | 2001 MCGIRL | Registration: | N5QV |
| Model/Series: | QUESTAIR VENTURE | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental | Serial Number: | 108 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | 03/19/2001, Condition | Certified Max Gross Wt.: | 2412 lbs |
| Time Since Last Inspection: | 12 Hours | Engines: | 1 Reciprocating |
| Airframe Total Time: | 12 Hours at time of accident | Engine Manufacturer: | Continental |
| ELT: | Installed, not activated | Engine Model/Series: | IO550G1B |
| Registered Owner: | PATRICK MCGIRL | Rated Power: | 290 hp |
| Operator: | PATRICK MCGIRL | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|----------------------------------|-------------------|--------------------------------------|------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | OGD, 4470 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 1253 MDT | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 10 Miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 10 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 180° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29.98 inches Hg | Temperature/Dew Point: | 28° C / 3° C |
| Precipitation and Obscuration: | | | |
| Departure Point: | OGDEN, UT (OGD) | Type of Flight Plan Filed: | None |
| Destination: | OGDEN, UT | Type of Clearance: | None |
| Departure Time: | 1030 MDT | Type of Airspace: | Class E |

Airport Information

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|----------------------|----------------------|---------------------------|------------------------------------|
| Airport: | OGDEN HINCKLEY (OGD) | Runway Surface Type: | Asphalt |
| Airport Elevation: | | Runway Surface Condition: | Dry |
| Runway Used: | 16 | IFR Approach: | None |
| Runway Length/Width: | 5352 ft / 150 ft | VFR Approach/Landing: | Precautionary Landing; Straight-in |

Wreckage and Impact Information

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|---------------------|-----------|----------------------|-------------------------|
| Crew Injuries: | 1 Serious | Aircraft Damage: | Destroyed |
| Passenger Injuries: | N/A | Aircraft Fire: | In-Flight and On-Ground |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Serious | Latitude, Longitude: | |

Administrative Information

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|-----------------------------------|--|--------------|------------|
| Investigator In Charge (IIC): | NORMAN F WIEMEYER | Report Date: | 02/20/2002 |
| Additional Participating Persons: | JOHN RICHTER; FAA FSDO; SALT LAKE CITY, UT | | |
| 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 pubinquiry@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](#).