



National Transportation Safety Board Aviation Accident Factual Report

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| Location: | De Lancey, NY | Accident Number: | NYC03LA145 |
| Date & Time: | 07/01/2003, 1430 EDT | Registration: | N1084B |
| Aircraft: | Mooney M20J | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 2 None |

Flight Conducted Under: Part 91: General Aviation - Positioning

On July 1, 2003, about 1430 eastern daylight time, a Mooney M20J, N1084B, was substantially damaged during an aborted takeoff from a non-designated airstrip in De Lancey, New York. The certificated commercial pilot and passenger were not injured. Visual meteorological conditions prevailed for the positioning flight destined for Doylestown, Pennsylvania (DYL). No flight plan had been filed for the flight that was conducted under 14 CFR Part 91.

The pilot reported that on June 26, 2003, he was cruising at 8,000 feet, en route from Burlington, Vermont (BTV), to Doylestown, when he experienced a total power loss. He set up for forced landing on an abandon airstrip, formerly known as Bishop Airstrip, De Lancey, New York. The landing was completed without damage, and the pilot brought a mechanic in to assess the situation. A problem was discovered in the single drive, dual magneto system. The magneto drive system was repaired, and the airplane released for flight. A mechanic accompanied the pilot on the accident flight.

The field that the pilot landed in was originally an airstrip that was 4,800 feet long, and 50 feet wide. It was orientated 010/190 degrees magnetic. The runway had since been plowed for agricultural use. The current owner of the property on which the airstrip was located reported that he cut the grass in a 1,600 feet, by 50 feet wide swath. He added that the hay beyond the area that he cut for the pilot, had recently been cut and was about 1,500 feet long for a total of 3,100 feet available for takeoff. The owner reported that he offered to cut an additional 400 feet that was located before the cut area; however, the pilot declined the offer.

The pilot stated:

"...after testing the mags and conducting pre-flight, I took off with one passenger. I attempted to make a short field takeoff. At 65 - 70 knots, I pulled the aircraft off. It did not climb. We settled back on the ground, picked up a little more speed and attempted to lift-off. The aircraft would not climb. We were approaching the end of the field, I elected to abort the take-off. We ended up at the end of the field. The left wing hit a tree and came off. The nose gear was also broken off...."

In a follow-up interview, the pilot reported that he aborted the takeoff with about 400 feet remaining to the trees that were ahead. When asked, the pilot reported that there were no problems with the engine.

The passenger onboard the airplane stated:

"Power appeared normal. Lift off at 65 kts - nose high - plane settled back onto field - bounced up again - and sees we would not clear trees - pilot cut power - steered slight right, left wing hit tree - tore off. Plane slid approx. 50 ft turned left - exited aircraft."

The mechanic who repaired the engine witnessed the accident. He stated:

"...I installed a repaired magneto on N1084B. Runup was satisfactory. Aircraft attempted a departure to the northeast into a headwind. The farmer mowed a portion of his field for the takeoff. The aircraft accelerated normally but ran off the end of the mowed area. The pilot then lifted off at a high angle of pitch and settled back into the area of higher grass. The pilot continued to takeoff again and lifted off again, with a high angle of pitch. It seemed as he was trying to pull it off the high grass portion of the runway, the aircraft now airborne veered to the southeast and hit a tree..."

The pilot reported the wind was a left quartering crosswind of 8 to 10 knots. The property owner reported the winds were from the west, about 15 knots.

According to the Mooney M20J Pilot's Operating Handbook, and FAA Approved Airplane Flight Manual, for a grass runway takeoff, the lift off speed would range from 55 knots at 2,300 pounds, to 59 knots, at 2,900 pounds. The speed at 50 feet would be 71 knots at 2,300 pounds and 76 knots at 2,900 pounds.

The field was located in the bottom of a stream bed canyon that was about 1,500 feet wide. Higher terrain existed in all quadrants. Initial climb would be in a winding canyon, below the tops of the hills on the surrounding terrain.

Pilot Information

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| Certificate: | Commercial | Age: | 73, Male |
| Airplane Rating(s): | Multi-engine Land; Multi-engine Sea; Single-engine Land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medical--w/ waivers/lim. | Last FAA Medical Exam: | 12/04/2002 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | 11/08/2001 |
| Flight Time: | 10000 hours (Total, all aircraft), 800 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft) | | |

Aircraft and Owner/Operator Information

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|-------------------------------|----------------------------------|--------------------------------|-----------------|
| Aircraft Make: | Mooney | Registration: | N1084B |
| Model/Series: | M20J | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | 24-3266 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | 12/04/2002, Annual | Certified Max Gross Wt.: | 2950 lbs |
| Time Since Last Inspection: | 146 Hours | Engines: | 1 Reciprocating |
| Airframe Total Time: | 2880.2 Hours at time of accident | Engine Manufacturer: | Lycoming |
| ELT: | Installed, not activated | Engine Model/Series: | IO-360-A |
| Registered Owner: | 907 th Flight squadron Inc. | Rated Power: | 200 hp |
| Operator: | On file | 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: | BGM, 1636 ft msl | Distance from Accident Site: | 45 Nautical Miles |
| Observation Time: | 1453 EDT | Direction from Accident Site: | 285° |
| Lowest Cloud Condition: | Few / 4700 ft agl | Visibility | 10 Miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 9 knots / 14 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 340° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.14 inches Hg | Temperature/Dew Point: | 24° C / 13° C |
| Precipitation and Obscuration: | | | |
| Departure Point: | De Lancey, NY (NONE) | Type of Flight Plan Filed: | None |
| Destination: | Dolestown, PA (DYL) | Type of Clearance: | None |
| Departure Time: | 1430 MST | Type of Airspace: | Class G |

Airport Information

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|----------------------|------------------------|---------------------------|------------|
| Airport: | Bishop Airstrip (NONE) | Runway Surface Type: | Grass/turf |
| Airport Elevation: | 1300 ft | Runway Surface Condition: | Dry |
| Runway Used: | 01 | IFR Approach: | None |
| Runway Length/Width: | 1600 ft / 50 ft | VFR Approach/Landing: | None |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|-----------------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 42.225278, -74.962778 |

Administrative Information

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| Investigator In Charge (IIC): | Robert L Hancock |
| Additional Participating Persons: | John D Ludwig; Federal Aviation Administration; Albany, NY |
| 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/ . |