



National Transportation Safety Board Aviation Accident Final Report

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|-------------------------|----------------------|-------------------------|------------|
| Location: | OLNEY, IL | Accident Number: | NYC95FA105 |
| Date & Time: | 05/09/1995, 0711 CDT | Registration: | N81TS |
| Aircraft: | BEECH BE60 | Aircraft Damage: | Destroyed |
| Defining Event: | | Injuries: | 2 Fatal |

Flight Conducted Under: Part 91: General Aviation - Business

Analysis

THE PILOT WAS CLEARED FOR THE LOCALIZER RUNWAY 11 APPROACH. THE AIRPLANE IMPACTED IN AN OPEN FIELD APRX 1 MILE NE OF THE AIRPORT AND APRX 600 FT LEFT OF THE EXTENDED CENTERLINE OF THE DEPARTURE END OF THE RUNWAY. A WITNESS SAW THE AIRPLANE AT A LOW ALTITUDE, AND STATED 'IT WAS FOGGY,' AND HE DID NOT SEE THE AIRPLANE UNTIL IT WAS DIRECTLY OVER HIS HEAD. THE WITNESS STATED THAT HE SAW THE AIRPLANE FOR ABOUT '3 SECONDS,' AT AN ALTITUDE OF 'BETWEEN 50 AND 100 FEET ABOVE THE GROUND,' AND IT DID NOT SOUND LIKE IT WAS HAVING 'MECHANICAL DIFFICULTY.' THE AIRPLANE TURNED LEFT (NORTH), AND STRUCK THE GROUND WITH THE LEFT WING. THE PUBLISHED MISSED APPROACH CALLED FOR A CLIMBING 'RIGHT TURN.' THE OLNEY AIRPORT AUTOMATED WEATHER OBSERVING SYSTEM (AWOS) WAS OPERATING AND CURRENT AT THE TIME OF THE ACCIDENT, BUT COULD ONLY BE OBTAINED BY TELEPHONE; HENCE ATC COULD NOT PROVIDE THE PILOT WITH THE CURRENT AWOS INFORMATION. THE PILOT WAS PROVIDED THE EVANSVILLE, INDIANA (EVV) WEATHER; 1,200 SCATTERED, MEASURED 4,500 OVERCAST, VISIBILITY 5 MILES, LIGHT RAIN AND FOG. EVANSVILLE WAS LOCATED APRX 20 MILES SE OF OLNEY. THE LOCAL (AWOS) WEATHER WAS; PARTIAL OBSCURATION, 100 FEET OVERCAST, VISIBILITY 3/4 MILE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper IFR procedures by descending below the minimum descent altitude and not executing the published missed approach procedures. A factor in the accident was the low overcast and fog conditions.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

1. (F) WEATHER CONDITION - FOG
2. (F) WEATHER CONDITION - LOW CEILING
3. (C) IFR PROCEDURE - IMPROPER - PILOT IN COMMAND
4. (C) MINIMUM DESCENT ALTITUDE - NOT COMPLIED WITH - PILOT IN COMMAND
5. (C) MISSED APPROACH - NOT PERFORMED - PILOT IN COMMAND

Factual Information

History of Flight

On May 9, 1995, about 0711 central daylight time, a Beech BE60, N81TS, collided with the ground during a localizer (LOC) approach to runway 11 at Olney/Noble Airport, Olney, Illinois. The airplane was destroyed. The pilot and one passenger were fatally injured. Instrument meteorological conditions prevailed, and an IFR flight plan had been filed. The airplane had departed Dixon, Illinois, at 0555, en route to Olney. The business flight was being conducted under 14 CFR Part 91.

At 0432, the pilot of N81TS, contacted the Automated Flight Service Station and requested a standard weather briefing for a flight from Dixon, to Olney.

The specialist provided the pilot the following weather information:

...airmet sierra is current for I F R...that takes in the Olney area basically...for operations above eight thousand feet icing is forecasted across this entire route...I've got scattered to broken coverage broken coverage, moderate to heavy rain showers across Illinois...Evansville's [20 mi SE of Olney] radar paints sixty percent coverage of thunderstorm heavy rain shower...they're located twenty northeast of Evansville...the forecast is optimistically calling for improvement to V F R conditions around 1000 across northern Illinois the airmet of course calls for conditions ending at afternoon...the en route forecast for widely scattered thunderstorms...generally a marginal V F R out look...at a thousand feet there's no cloud top information forecasted or reported...no pilot reports at all.

The specialist continued to provide the pilot forecasts for Rockford and Decatur, IL, in addition to Notices to Airmen (NOTAMS) for the Olney/Noble Airport.

The pilot told the specialist, "sounds like we have all kinds of weather right." The specialist replied, "yah." The pilot then asked for the Mount Vernon, IL (MVN), weather report. Mount Vernon was located 45 miles southwest of Olney/Noble, Airport.

The MVN weather was, "...two hundred scattered, seven thousand five hundred scattered, ten miles [visibility], [temperature] sixty three, [dew point] sixty...calm wind...." The pilot asked if the specialist had said "200 scattered," and specialist answered "that's right." The briefing was ended at 0440:03.

Records indicated that the airplane was last refueled at Dixon, April 20, 1995, with 4.3 gallons of fuel. There is no record to indicate if the pilot had flown the airplane after it was refueled on April 20th.

After departure, at 0558, the pilot established communications with the Air Traffic Control (ATC) Specialist at the CAB Arrival Radar position, Rockford, IL, and requested an IFR clearance. The airplane was radar identified and issued an IFR clearance.

According to the ATC Transcript of Communications, at 0645:20, N81TS was located approximately 20 miles northwest of the Olney Airport, and descending to an altitude of 2,600 feet mean sea level (MSL). The pilot was told, "...maintain 2,600 until established cleared localizer runway one one approach Olney/Noble...."

At 0645:50, the pilot was told, "...no weather information available for the Olney/Noble

Airport...." The specialist gave the pilot the Evansville weather which was:

...twelve hundred scattered, measured ceiling four thousand three hundred overcast, visibility five miles and light rain and fog, the wind is zero eight zero at three, altimeter two nine seven four....

The specialist then advised the pilot "expect visual approach." The pilot responded that he preferred to perform the "ILS Approach" and specialist replied, "...you can expect the ILS approach...."

At 0656:53, the pilot was cleared for the localizer runway 11 approach, given the Evansville weather again, and told to report "established."

The specialist advised the pilot at 0704:31, that "radar contact [was] lost," 2.5 miles from ALAKE Intersection. The pilot acknowledged the transmission.

At 0705:58, the pilot reported "established on the ILS...."

The specialist told the pilot to cancel his flight plan on the current frequency, or with Kansas City Center; and a "change to advisory is approved." There was no further communication with the airplane.

A witness, standing in the southeast corner of a pasture, approximately 1 mile from the airport and the departure end of runway 11, said he "heard an airplane coming at a low altitude." He said "it was foggy," so he stopped work and looked for the airplane. He did not see the airplane until it was directly over his head. The witness stated that he only saw the airplane for about "3 seconds," and the airplane's altitude appeared to be "between 50 and 100 feet above the ground." In his written statement to the Sheriff, he stated:

...[the airplane was] moving east [away from the airport] and banking to the north [left], the wings were not level. When I could not see it anymore, I went back to work. Less than 10 seconds later I heard it explode on impact. I turned in time to see the fireball...almost directly east of me. It was too foggy to see anything but the fireball...the plane did not sound like it was having mechanical difficulty. It seemed to be running fine.

The accident occurred during the hours of day light at approximately 38 degrees, 43 minutes north, and 88 degrees, 09 minutes west.

PERSONNEL INFORMATION

The pilot held a Private Pilot Certificate, with multi-engine, single engine land, and instrument airplane ratings.

An FAA Third Class Airman Medical Certificate was issued to the pilot on December 11, 1993, with limitations for vision.

The pilot's personal logbook was not located. His total flight hours indicated in his last FAA medical application, were 2,150. According to an insurance application, dated February 16, 1995, he claimed 2,808.5, flight hours of which 1,404.5 hours were in Beech BE60 aircraft.

METEOROLOGICAL INFORMATION

According to the Airport Manager at the Olney Airport, the Automated Weather Observing System (AWOS) was operating and current at the time of the accident. However, the current

AWOS could only be obtained by telephone, because a VHF radio frequency had not been assigned by the FAA. The current AWOS information could not be provided to the pilot of N81TS. The pilot was cleared for the localizer approach, and given the Evansville (EVV), Indiana weather. Evansville was located approximately 20 miles southeast of Olney.

The local (AWOS) weather at 0721 was; partial obscuration, 100 feet overcast, visibility 3/4 mile, temperature 65 degrees F, dew point 64 degrees F, wind 160 degrees, 5 knots, altimeter 29.72 inches Hg.

The EVV weather at 0645 was; 1,200 scattered, measured 4,500 overcast, visibility 5 miles, light rain and fog, temperature 67 degrees F, dew point 66 degrees F, wind 080 degrees, 3 knots, altimeter 29.74 inches Hg.

The person that was to meet the occupants of N81TS at the Olney Airport said that he arrived at the airport approximately 0715. The airplane was not at the airport and there was "heavy fog."

AIDS to NAVIGATION

The Localizer [LOC] Runway 11 approach to the airport, frequency was 110.50. The Initial Approach Fix (IAF), LYMON Intersection (INT), was determined by reference to the 328 degree radial of the Samsville VOR (116.6). The IAF was 4.0 nautical miles from the missed approach point (MAP) on the localizer course of 106 degrees.

The published minimum descent altitude (MDA), when the pilot was utilizing the Evansville altimeter, was 1,140 feet, which was 658 feet above ground level (482 feet airport elevation).

The published missed approach was; "Climbing RIGHT turn to 2000 feet via ILZW [Olney/Noble] LOC WEST course to LYMON INT and hold.

At 1732, on May 9, 1995, the Columbia, Missouri, Flight Service Station issued NOTAM 05/047, "localizer 11 unusable."

AIRCRAFT INFORMATION

The aircraft and engine log books were not found in the wreckage. The pilot's family searched for these items, but were unable to locate them.

AERODROME INFORMATION

The Olney/Noble Airport had two runways; 11/29, which was 4,100 feet long; and runway 3/21, which was 3,599 feet long. Runway 11 was in use at the time of the accident. This runway was equipped with medium-intensity runway edge lights (MIRL), which were pilot controlled by microphone keying, on frequency 123.00. There were approach lights, runway end identification lights (REIL), and visual approach slope indicator system (VASI).

WRECKAGE AND IMPACT INFORMATION

The wreckage was examined at the accident site on May 9-10, 1995. All the major components of the airplane were accounted for within the accident site.

The airplane impacted in a level, open field, approximately 1 mile northeast of the airport and approximately 600 feet left of the extended centerline, and departure end of runway 11.

The first ground scar was observed on the southwest end of the field. Pieces of the left wing tip with the red navigational lens were found approximately 5 feet north of the first ground scar.

From the first ground scar the airplane continued in a northeasterly direction, shedding parts, for approximately 340 feet, before coming to rest with the nose of the airplane heading in a southwesterly direction. The airplane was destroyed by impact and fire damage, which rendered all the instruments, except an altimeter, and switches unreadable. The altimeter was found outside the wreckage and fire, and was pointing to 100 feet. The Kolsman window was missing.

Control continuity was established to all the flight controls by tracing the control cables. Examination of the wreckage revealed that the aileron trim tab actuator was found 3 degrees tab up. The rudder trim was found 2 degrees tab right, and the elevator trim tab actuator was found 3 degrees tab down.

The trailing edge flaps were found in the up position, and the landing gears were in the down position.

Left Engine

The left engine was found lying right-side up, partially on top of the right engine and tangled in the main wreckage. The left engine displayed impact and fire damage. The crankcase halves were intact and the cylinder cooling fins had impact damage. All the accessories were attached. The intake and exhaust pipes for cylinders 1, 3 and 5 had separated.

The left propeller was separated from the engine during the impact sequence, and was found approximately 175 feet north of the first impact ground scar. All three blades were attached to the hub and were bent approximately 45 degrees rearward. They were slightly twisted in the direction of rotation.

The fuel servo remained attached. The inlet fuel screen was removed. Fuel was evident and the screen was clean. The throttle linkage at the servo was broken off. The mixture linkage was intact from the fire wall and was found in the mid-range position.

The turbocharger was in place and connected to the wastegate. Fire damage precluded rotation of the turbocharger by hand.

Both magnetos remained attached, and were destroyed by fire damage.

The top spark plugs were removed and were clean of carbon deposit, with all leads a light grayish color.

The left vacuum pump was destroyed by fire damage .

Right Engine

The right engine was found lying upside down, partially under the left engine and tangled in the main wreckage. The right engine displayed impact and fire damage. The crankcase halves were intact and the cylinder cooling fins had impact damage. All the accessories were attached. The exhaust pipes for cylinders 2, 4 and 6 had separated. Cylinder #5, displayed impact damage on the bottom forward area.

The right propeller was separated from the engine during the impact sequence and was found approximately 240 feet north of the first impact ground scar. All three blades were attached to the hub. One blade was bent approximately 45 degrees rearward, and slightly twisted opposite the direction of rotation. Chordwise marks were observed on the all 3 propeller blades. The leading edge tips of all 3 blades were broken. The propeller governor was found in place, and

the control arm was found in the full advanced position.

The fuel servo was in place and its condition could not be determined.

The turbocharger was in place and connected to the wastegate. The hot and cold side rotated freely by hand. The wastegate was found open.

Both magnetos remained attached and were destroyed by fire damage.

The right vacuum pump was destroyed by fire damage .

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot, on May 9, 1995, at the Richland Memorial Hospital, in Olney, Illinois, by Dr. John Heidingsfelder.

Toxicological tests were conducted at the Armed Forces Institute of Pathology, Washington, DC, and revealed, "the liver contained 0.3 mg/kg of chlorpheniramine."

According to the American Medical Association's (AMA), Guide to Prescription and Over-the-Counter Drugs, chlorpheniramine is given to treat "allergies" such as hay fever, hives and allergic swelling.

ADDITIONAL INFORMATION

The airplane was released to Mr. Pete McClure, representing the owner's insurance company, on May 11, 1995.

Pilot Information

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|----------------------------------|---|--|----------------------------|
| Certificate: | Private | Age: | 54, Male |
| Airplane Rating(s): | Multi-engine Land; 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: | Yes |
| Medical Certification: | Class 3 Valid Medical--w/ waivers/lim. | Last FAA Medical Exam: | 12/11/1993 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | |
| Flight Time: | 2805 hours (Total, all aircraft), 1405 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

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|-------------------------------|--------------------------|--------------------------------|-----------------|
| Aircraft Make: | BEECH | Registration: | N81TS |
| Model/Series: | BE60 BE60 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | P374 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 6 |
| Date/Type of Last Inspection: | 09/13/1994, Annual | Certified Max Gross Wt.: | 6775 lbs |
| Time Since Last Inspection: | 83 Hours | Engines: | 2 Reciprocating |
| Airframe Total Time: | 1079 Hours | Engine Manufacturer: | LYCOMING |
| ELT: | Installed, not activated | Engine Model/Series: | TIO-541-E1C4 |
| Registered Owner: | LEONARD SCHROETLIN | Rated Power: | 380 hp |
| Operator: | LEONARD SCHROETLIN | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|----------------------------------|----------------------------------|--------------------------------------|------------------|
| Conditions at Accident Site: | Instrument Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | OLY, 482 ft msl | Distance from Accident Site: | 1 Nautical Miles |
| Observation Time: | 0721 CDT | Direction from Accident Site: | 225° |
| Lowest Cloud Condition: | Partial Obscuration / 100 ft agl | Visibility | 0.75 Miles |
| Lowest Ceiling: | Overcast / 100 ft agl | Visibility (RVR): | 0 ft |
| Wind Speed/Gusts: | 5 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 160° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 18° C / 18° C |
| Precipitation and Obscuration: | | | |
| Departure Point: | DIXON, IL (C73) | Type of Flight Plan Filed: | IFR |
| Destination: | | Type of Clearance: | IFR |
| Departure Time: | 0555 CDT | Type of Airspace: | |

Airport Information

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|----------------------|-------------------|---------------------------|----------------|
| Airport: | OLNEY/NOBLE (OLY) | Runway Surface Type: | Asphalt |
| Airport Elevation: | 482 ft | Runway Surface Condition: | Wet |
| Runway Used: | 11 | IFR Approach: | Localizer Only |
| Runway Length/Width: | 4100 ft / 75 ft | VFR Approach/Landing: | Full Stop |

Wreckage and Impact Information

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|---------------------|---------|----------------------|-----------|
| Crew Injuries: | 1 Fatal | Aircraft Damage: | Destroyed |
| Passenger Injuries: | 1 Fatal | Aircraft Fire: | On-Ground |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 Fatal | Latitude, Longitude: | |

Administrative Information

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|-----------------------------------|--|--------------|------------|
| Investigator In Charge (IIC): | ALAN J YURMAN | Report Date: | 03/21/1996 |
| Additional Participating Persons: | RUSS WATKINS; SPRINGFIELD, IL JIM HILL; SPRINGFIELD, IL GREGORY A ERIKSON; WAYNE, IL EDDIE E WEBBER; 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](#).