



# Aviation Investigation Final Report

<b>Location:</b>	SALEM, Michigan	<b>Accident Number:</b>	CHI93FA234
<b>Date &amp; Time:</b>	June 28, 1993, 08:45 Local	<b>Registration:</b>	N3899Y
<b>Aircraft:</b>	CESSNA 210D	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

WITNESSES OBSERVED THE AIRPLANE MANEUVERING AT LOW ALTITUDE FOR SEVERAL MINUTES BEFORE IT PITCHED UP ABRUPTLY, ENTERED A STEEP RIGHT BANK AND DESCENDED INTO TERRAIN. ACCORDING TO WITNESSES AND POSTACCIDENT EXAMINATION, THERE WAS NO INDICATION OF PREIMPACT AIRFRAME OR ENGINE MALFUNCTION. THE PILOT'S CERTIFICATE HAD BEEN REVOKED IN 1979. HIS MOST RECENT LOGGED FLIGHT WAS A BIENNIAL FLIGHT REVIEW IN NOVEMBER 1974. RECORDS INDICATE THAT THE PILOT HAD A DIABETIC CONDITION WHICH DATED BACK TO 1974. THE AUTOPSY REVEALED: 'OLD ANTEROLATERAL AND POSTERIOR WALL MYOCARDIAL INFARCTS. UP TO 90% OCCLUSIVE CORONARY ARTERY ATHEROSCLEROSIS.' THE PILOT'S BRIEFCASE CONTAINED ONE BOTTLE GLUCOSTIX, ONE SMALL CAN ORANGE JUICE, AND PRESCRIPTION MEDICATIONS AS FOLLOWS: CARDIZEM CD (240 MG), VOLTAREN (75 MG), HUMULIN HI310 (10ML), AND VASOTEC (10 MG).

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's physical impairment.

## Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: MANEUVERING

Findings

1. WEATHER CONDITION - DRIZZLE/MIST
2. (C) AIRCRAFT CONTROL - UNCONTROLLED - PILOT IN COMMAND
3. (C) PHYSICAL IMPAIRMENT - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: MANEUVERING

## Factual Information

### HISTORY OF FLIGHT

On June 28, 1993, at 0845 eastern daylight time, a Cessna 210D, N3899Y, piloted by the registered owner, impacted terrain while maneuvering at low altitude in the vicinity of Salem, Michigan. The airplane was destroyed by impact forces. The pilot, the sole occupant, received fatal injuries. Marginal visual meteorological conditions prevailed for the flight, no flight plan was filed. The flight operated under 14 CFR Part 91. The time and point of origin are unknown. The destination is believed to be Flint, Michigan.

Federal Aviation Administration (FAA) records indicated the pilot contacted Lansing Automated Flight Service Station (LAN AFSS) at 0710. The pilot reported he was airborne in the vicinity of Pellston, Michigan, and requested "Flint weather and winds aloft... ." AFSS personnel advised the pilot of thunderstorm activity moving through southern Michigan and informed him of Convective SIGMET 25E. About 0713, the pilot thanked the AFSS Specialist for the weather information and wished him "Good day." There were no further recorded transmissions from the pilot. Excerpts from the Air Traffic Control (ATC) package, and weather depiction charts are appended.

One witness observed the airplane circling over the field he was surveying in Salem Township, approximately 2 1/2 miles southwest of the accident site. He stated: "At first, I thought it may be the property owner circling his house or property, but as the plane circled overhead three to four times, it kept getting lower and lower, and one time it nearly cut off the top of a tree. At this point, the stormfront came in with heavy rain and fog....the pilot...flew off to the northeast."

Two witnesses who resided about 1 mile west of the accident site reported they first heard the airplane flying over their house about 0835. They walked out to their deck and observed the airplane circling at a low altitude (estimated 100 feet above the ground) over a cow pasture located east of their property. The witnesses reported after several circles overhead, the airplane moved to the northeast. They stated the airplane had descended to approximately 40 feet above the ground, and appeared to be preparing to land.

The witnesses stated the pilot appeared to have control of the airplane until immediately prior to impact. One witness stated the airplane "pitched straight up, it looked like it was standing on its tail. We saw the airplane as if we were on top of it, then it entered a steep right bank into the ground." He reported the airplane struck the ground, then cartwheeled to the east "with parts flying." The witnesses estimated the time of impact at 0845. Witness statements, Record of Interview, and Radar track are appended.

### OTHER DAMAGE

A pasture fence was damaged during the impact sequence. There was also impact damage and fuel blight to portions of an alfalfa field.

## CREW INFORMATION

The pilot was issued Private Pilot Certificate Number 756849, with airplane single engine land privileges, on November 14, 1946. He successfully completed a checkride for an Instrument Rating on October 22, 1964, and obtained airplane single engine sea privileges on July 2, 1967. The logbook records available for the pilot revealed the most recent logged flight was a biennial flight review which took place on November 1, 1974.

Federal Aviation Administration (FAA) records revealed the pilot received a Notice of Proposed Certificate Action from their Great Lakes Regional Council in October, 1979. This Notice was followed by an Order of Revocation, dated November 15, 1979. The documents cited an occurrence at Indianapolis, Indiana on June 12, 1979 during which the pilot operated an airplane "...in a careless manner so as to endanger the life or property of another. The Order stated "...you had your head down on the control yoke...then got out of the aircraft and walked with an uncertain gait to the company's lounge...With respect to your having difficulty in maintaining your balance, you advised them that you were diabetic and they gave you glucose in gelatin form and...transported you to the...Hospital... ."

The Order continued "...When you were interviewed by FAA Inspectors...you stated that you were diabetic, had been under a physician's care for its treatment and had been taking insulin for approximately 5 years. You stated that your pilot logbook was not current and that you had not completed biennial flight review within the past two years... ." The Order of Revocation further stated that as of July 13, 1979, there was no record of current Airman Medical Certificate in the pilot's name.

The Order of Revocation stated the pilot had operated an airplane "...in a careless manner so as to endanger the life or property of another..." and ordered that any airman certificate held by the pilot be revoked for a period of one year. The pilot surrendered his private pilot certificate to the FAA on November 4, 1980. There is no FAA record of Airman or Medical Certificate action since that date. Copies of the Notice of Certificate Action, Order of Revocation, Airman Stop Order, and a photocopy of the surrendered certificate are appended.

During the course of the investigation, a witness came forward with a statement regarding another incident involving the accident pilot/airplane. The incident occurred about 1130 on April 7, 1993, at Elkhart, Indiana. The witness reported ATC cleared the pilot to taxi to Runway 17, with instructions to hold short of the runway. The pilot proceeded beyond the hold line, stopped and did not respond to ATC radio calls. The witness stated: "After no contact the tower called me and (asked) if I could go out and see what the problem was. When I got to the aircraft, the pilot was very nervous and didn't seem to understand his radio. He seemed very disoriented....I had him follow me to the radio shop...after a cup of coffee and snack he

seemed better. He got in the aircraft and left." A copy of the witness statement is appended.

#### AIRCRAFT INFORMATION

Records indicate the airplane completed an annual inspection on February 23, 1993, at a total time (tachometer) of 4,581.9 hours. The airplane tachometer time at the accident site was 4,606.15.

#### METEOROLOGICAL INFORMATION

Air Traffic Control (ATC) records indicate the pilot contacted LAN AFSS requesting Flint weather and winds aloft. The briefer advised him of widespread thunderstorm activity in southern Michigan, and issued Convective SIGMET 25E. The SIGMET referenced a line of severe thunderstorms extending from sixty miles southeast of Muskegon, Michigan to ten miles southeast of Detroit, Michigan, fifteen miles wide and moving to the southeast at thirty knots. Thunderstorm tops were reported at 45,000 feet, with tornadoes, one inch hail, and wind gusts to 50 knots possible.

A Special weather observation (0805) and a Surface weather observation (0854) taken at the Willow Run Airport (YIP), in Ypsilanti, Michigan, cited visual meteorological conditions with visibilities ranging from 3 to 5 miles in thunderstorms, light rainshowers and fog. YIP is located 11 miles south of the accident site. Excerpts from the ATC Package and Radar Summary Charts are appended.

Witnesses nearest the accident site indicated although it had been raining before the accident, there was little or no precipitation when the accident occurred. They stated the clouds seemed low, but visibility was good and they could see the airplane clearly as it maneuvered.

#### WRECKAGE/IMPACT INFORMATION

Witnesses observed the airplane pitch up abruptly and enter a steep right bank into the ground. They stated the airplane impacted the ground nose and right wing first, then cartwheeled to the east "...with parts flying..." The airplane came to rest in an alfalfa field located northwest of the intersection of Brookville and Salem Roads (see maps), in Salem, Michigan.

The wreckage path was approximately 254 feet long, and aligned along a 090 degree course. The initial impact occurred in a cow pasture, about 39 feet from the east border fenceline. The wreckage impacted the fence, then the alfalfa field. The fuselage came to rest 215 feet east of the fenceline, aligned on a 160 degree heading. Both wings separated from the remainder of the airframe and were located approximately 80 feet west of the fuselage. The right wing strut was located about 5 feet east of the fenceline, the left wing strut was still attached to the wing. Landing gear and wing flaps were not extended.

Postaccident examination revealed no evidence of preimpact airframe or engine malfunction.

Witnesses collectively observed the airplane maneuvering for approximately 20 minutes before the accident occurred. They reported the airplane was low, but turns were steady and shallow, and the engine noise was constant.

#### MEDICAL/PATHOLOGICAL INFORMATION

Autopsy and toxicological examinations were conducted. The toxicological report stated "24.500 (ug/ml, ug/g) Salicylate detected in Urine" and "Nicotine Metabolite was detected in Urine." FAA medical personnel stated these results were indicative of pain reliever and tobacco product use, respectively. The toxicological report is appended.

The autopsy, #93-A-197, was conducted on June 28, 1993, by Doctors Margaret M. Moll, M.D., and Kenneth D. McClatchey, M.D., D.D.S., of the University of Michigan Medical Examiner Office, and was reviewed by Dr. David R. McNutt, M.D., Health Officer - Medical Examiner for Washtenaw County, 555 Towner, Box 915, Ypsilanti, Michigan, 48197-0915. The autopsy reported "Old anterolateral and posterior wall myocardial infarcts. Up to 90% occlusive coronary artery atherosclerosis. Left ventricular myocardial hypertrophy....Serum glucose (6 1/4 hours after death) 20 mg/dL."

A briefcase located in the airplane at the accident site contained one small can orange juice, one bottle of Glucostix, and several prescription medications in the pilot's name. The medications included: Cardizem CD (240 MG), Voltaren (75 MG), Humulin HI310 (10 ML), and Vasotec (10 MG).

#### Pilot Information

<b>Certificate:</b>	None	<b>Age:</b>	67, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Unknown Expired	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	800 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N3899Y
<b>Model/Series:</b>	210D 210D	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	21058399
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	February 8, 1993 Annual	<b>Certified Max Gross Wt.:</b>	3100 lbs
<b>Time Since Last Inspection:</b>	24 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4606 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-520-A
<b>Registered Owner:</b>	SEDER, JAMES B.	<b>Rated Power:</b>	285 Horsepower
<b>Operator:</b>	SEDER, JAMES B.	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown / 1000 ft AGL	<b>Visibility</b>	3 miles
<b>Lowest Ceiling:</b>	Overcast / 1000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	N/A - None - Fog		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	FLINT (FNT)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	00:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

## Wreckage and Impact Information

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



## Administrative Information

Investigator In Charge (IIC):	Reeves, Jodi
Additional Participating Persons:	JUAN C THOMPSON; BELLEVILLE , MI ARTHUR A WARNER; BELLEVILLE , MI
Original Publish Date:	August 26, 1994
Last Revision Date:	
Investigation Class:	<a href="#">Class</a>
Note:	
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=9170">https://data.nts.gov/Docket?ProjectID=9170</a>

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