



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	NORMAN, OK	<b>Accident Number:</b>	FTW01FA033
<b>Date &amp; Time:</b>	12/10/2000, 0448 CST	<b>Registration:</b>	N52KL
<b>Aircraft:</b>	Cessna 421B	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

---

## Analysis

According to air traffic control communication and radar data, the flight was VFR over the top, approximately 7,900 feet, and requested an IFR clearance to the destination airport. The flight was issued an IFR clearance and, subsequently, was cleared for the localizer runway 3 approach. Radar data indicates that the airplane intercepted the localizer and began tracking inbound. Once the airplane reached the final approach fix, the airplane entered a shallow descent, but did not reach the MDA until after passing the missed approach point (MAP). The airplane flew past the MAP, continued to descend and over flew the runway. The final radar return was captured at 1,200 feet and one mile northeast of the airport, where the airplane was later located. The weather observation facility located at the airport reported that, 11 minutes before the accident, the winds were from 140 degrees at 6 knots, ceiling 200 feet overcast, visibility 1/4 miles in fog, temperature 45 degrees Fahrenheit and dew point 45 degrees Fahrenheit. A person who was at the airport at the time of the accident reported that the "clouds were low and visibility was poor." Toxicological testing performed on the pilot by the FAA's Civil Aeromedical Institute, Oklahoma City, Oklahoma, revealed the following: 0.121 (ug/ml, ug/g) amphetamine detected in blood, 0.419 (ug/ml, ug/g) amphetamine detected in liver, amphetamine detected in kidney, 4.595 (ug/ml, ug/g) methamphetamine detected in blood, 5.34 (ug/ml, ug/g) methamphetamine detected in liver, 3.715 (ug/ml, ug/g) methamphetamine detected in kidney, pseudoephedrine present in blood, and pseudoephedrine present in liver. The airframe and engines were examined and no anomalies were discovered that would have effected operation of the flight.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to follow the instrument approach procedure and his continued descent below the prescribed minimum descent altitude (MDA). Contributory factors were the pilot's physical impairment from drugs, the low ceiling, fog, and dark night light conditions.

## Findings

---

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: APPROACH

### Findings

1. STOLEN AIRCRAFT/UNAUTHORIZED USE
2. (C) IFR PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND
3. (C) MINIMUM DESCENT ALTITUDE - CONTINUED BELOW - PILOT IN COMMAND
4. (F) IMPAIRMENT(DRUGS) - PILOT IN COMMAND
5. (F) WEATHER CONDITION - LOW CEILING
6. (F) WEATHER CONDITION - FOG
7. (F) LIGHT CONDITION - DARK NIGHT

## Factual Information

### HISTORY OF FLIGHT

On December 10, 2000, at 0448 central standard time, a Cessna 421B, multi-engine airplane, N52KL, was destroyed when it impacted terrain while maneuvering near Norman, Oklahoma. The airplane was registered to a private individual, doing business as Four Twenty One Inc., of Oklahoma City, Oklahoma. The instrument rated commercial pilot, who was the operator, and his one passenger sustained fatal injuries. Night instrument meteorological conditions prevailed and an instrument flight rules (IFR) clearance was issued en route for the 14 Code of Federal Regulations Part 91 personal flight. The cross-country flight originated from the Altus Municipal Airport, Altus, Oklahoma, and was destined for the University of Oklahoma Westheimer Airport, Norman, Oklahoma.

According to the owner of the airplane, on December 3, 2000, the airplane was delivered to Airman Flight School, Norman, Oklahoma, for an annual inspection. He stated that, once the airplane was delivered "no one was authorized to fly the plane." According to Airman personnel, the annual inspection had not been started as close-of-business on December 18, 2000.

According to the airport manager of the Altus Municipal Airport, Altus, Oklahoma, the Cessna 421 arrived at the airport on December 9, 2000, at 1850. He reported that when the terminal building was opened at 0700, on December 10, 2000, the Cessna 421 was not on the ramp.

According to information provided by Oklahoma City Terminal Radar Approach Control (TRACON), on December 10, 2000, at 0434, the airplane was VFR over-the-top and six miles west of Chickasha, Oklahoma, approximately 7,900 feet, when the pilot stated that he had the "ASOS at Westheimer" and requested an IFR clearance to the Westheimer Airport. The controller issued the pilot an IFR clearance and the current weather for the Will Rogers World Airport, Oklahoma City, Oklahoma, and for the Westheimer Airport. At 0443, the flight was cleared for the localizer runway 03 instrument approach, and the pilot acknowledged. At 0444, the controller advised the pilot that the missed approach procedure would be to "fly heading three five zero and maintain three thousand." Subsequently, at 0445, the flight was one mile from the final approach fix (FAF) and was approved to change to the Westheimer Airport advisory frequency. The pilot acknowledged and no further communications were received from the airplane.

Radar data indicated that the aircraft intercepted the localizer inbound approximately 3,000 feet, 8 nautical miles from the airport and that the airplane was descending. The aircraft tracked along the extended centerline of runway 03. The airplane crossed the Sooner intersection (FAF) approximately 2,400 feet and continued to descend; however, as the airplane crossed the missed approach point (0.9 DME) it was at 1,900 feet, approximately 320 feet above the minimum descent altitude (MDA). The airplane continued to descend and over flew the runway. The airplane then turned left to a northerly heading before it disappeared from radar. The last three reported altitudes were 1,500 feet msl at 0448:15; 1,500 feet msl at 0448:20; and 1,200 feet msl at 0448:24.

There were no reported eyewitnesses to the accident. However, according to a police officer, who was patrolling the airport, an airplane over flew runway 03 at the Westheimer Airport between 0445 and 0450. He stated that he did not see the airplane or any lights, but he did

hear the engines operating. He did not recall if the approach/runway lights were illuminated. He added that the "clouds were low and visibility was poor."

Approximately 1000, personnel from Airman Flight School located the wreckage of the airplane, approximately 1 mile northeast of the Westheimer Airport.

#### PERSONNEL INFORMATION

On November 30, 1988, the pilot's airline transport certificate was revoked for a five year time period due to violations of FAR Part 91.12A, 91.13, 91.73A, 91.73D, and 91.9. On November 4, 1995, the pilot was issued a commercial pilot certificate, and on December 17, 1997, he was issued a certified flight instructor certificate. He held the following ratings: airplane single engine land, airplane multiengine land and airplane instrument.

On August 30, 2000, the pilot was issued a second-class medical certificate, which stipulated that he must have glasses available for near vision. According to the medical application, the pilot had accumulated a total of 10,000 flight hours.

The pilot was employed by Airman Flight School as a flight instructor.

#### AIRCRAFT INFORMATION

The 1972 model airplane was equipped with two 375-horsepower Continental GTISO-520-H engines and two 3-bladed, constant speed, full feathering McCauley propellers.

On December 10, 1999, the airframe underwent its most recent annual inspection, at a total airframe time of 5,266.7 hours. On the same date, both engines and propeller assemblies underwent their most recent 100-hour inspections. On November 22, 1998, the two transponders underwent their most recent inspections. On September 10, 1998, the aircraft's altimeters and static pressure system underwent their most recent inspections. The logbook entry for the check did not mention the pitot system.

The airframe had accumulated a total of 5,315.1 hours at the time of the accident. The left and right engines had accumulated a total of 773.0 and 589.0 flight hours since overhaul, respectively, at the time of the accident. The left and right propeller assemblies had accumulated a total of 198.8 and 589.0 flight hours since overhaul, respectively, at the time of the accident.

#### METEOROLOGICAL INFORMATION

At 0437, the weather observation facility at the University of Oklahoma Westheimer Airport, reported the wind from 140 degrees at 6 knots, an overcast ceiling at 200 feet, visibility 1/4 mile in fog, temperature 45 degrees Fahrenheit, dew point 45 degrees Fahrenheit, and an altimeter setting of 29.93 inches of Mercury.

There was no record of the pilot having contacted the McAlester Automated Flight Service Station for a weather briefing on December 9 or 10, 2000.

#### AERODROME INFORMATION

The University of Oklahoma Westheimer Airport (OUN) is located at north 035 degrees 44.032 minutes latitude and west 097 degrees 19.663 minutes longitude, and the airport's elevation is 1,182 feet msl. The airport's air traffic control tower (ATCT) operates on frequency 118.00, daily between 0800 and 2000. When the ATCT is not in operation the common traffic advisory frequency is 118.00. Runway 03 is oriented on a magnetic heading of 031 and

measures 4,747 feet long by 100 feet wide. Runway 03 is outfitted with medium intensity runway lights and a medium intensity approach light system, both of which are pilot activated on the 118.00 frequency.

#### AIDS TO NAVIGATION

Runway 03 is equipped with a localizer type approach, supplemented by distance measuring equipment (DME). The localizer frequency is 111.10 and the final approach course is aligned at 029 degrees magnetic. For a straight-in landing (with the local altimeter setting) the minimum descent altitude (MDA) is 1,580 feet msl (404 feet agl), and the minimum visibility is 3/4 mile for category A and B airplanes. The approach chart stipulates that the airplane intercept the final approach course and become established inbound, within 10 nautical miles of the runway. Once established, the approach chart dictates that the airplane track the localizer inbound along the final approach course and maintain an altitude no lower than 2,500 feet until crossing the final approach fix (Sooner), at which point a descent to the MDA should be initiated. The missed approach point is 0.9 DME, or 3:00 minutes at 90 knots, from the final approach fix.

Following the accident, the FAA ground checked the localizer and DME facilities and no anomalies were noted.

#### WRECKAGE AND IMPACT INFORMATION

The wreckage of the airplane was located 1 mile northeast of the Westheimer Airport. A GPS receiver recorded the location at north 035 degrees 15.559 minutes latitude and west 097 degrees 27.657 minutes longitude, at an altitude of 1,281 feet msl. The airplane came to rest on a measured magnetic heading of 330 degrees. The airplane remained intact, except for a section of the nose gear strut assembly that was found 45 feet from the right wing-tip and the left wing-tip's cap that was found 54 feet from the left wing-tip. There was no evidence of fire. The engines remained in their nacelles.

The cockpit was examined. All of the flight and engine instruments were in place, except for the left side (pilot's) altimeter, which was recovered from behind the instrument panel. The altimeter's kollsman window setting was 29.94 inches of Mercury. The frequency selected in the Comm 1 position was 118.00, Comm 2 was 124.2, Nav 1 was 111.10 and Nav 2 was 114.1. The Nav 1 omni bearing selector (OBS) was set at 035 degrees and the Nav 2 OBS was set at 255 degrees. The DME was found in the ON position. The ADF frequency selected was 1689.

The left throttle was found in the full forward position and the right throttle was found in the midrange position. The left and right propeller controls were found in the midrange position. The left mixture control was found in the idle cutoff position and the right mixture control position was found in the midrange position. The left engine's fuel selector was found in the right main position and the right engine's fuel selector was found in the left main position (cross feed). The left engine's fuel boost pump was found in the off position, the right engine's fuel boost pump was found in the low position, and the fuel transfer pump was found in the off position. Additionally, the landing gear was extended and flaps were extended 15 degrees.

The right engine's propeller was examined. The spinner did not display any scratching and the only damage to the spinner was compression through a continuous 180-degree area of the circumference of the assembly, consistent with ground impact. One blade was loose in the hub and exhibited chordwise scratching and an "S" type bend. A second blade was bent aft 90 degrees approximately 2 feet inboard from the tip and exhibited an "S" type bend. A nick was

observed on the leading edge of this blade 6 inches inboard from the tip. The third blade was embedded in the ground and only visible after the engine and propeller assemblies were removed by recovery crews. The third blade exhibited an "S" type bend.

The left engine's propeller was examined. The spinner did not display any scratching. One blade was bent aft 90 degrees 1 foot inboard from the wing tip. The second blade was not damaged. The third blade exhibited an "S" type bend.

The fuel tanks were examined at the accident site. The left main wing-tip tank's integrity was compromised; however, initial responders to the site reported that fuel was present on the ground beneath the tank upon their arrival. The left auxiliary wing tank contained approximately 2 gallons of fuel. The right main wing-tip tank contained 12 gallons of fuel, and the right auxiliary tank contained an undetermined amount of fuel and fuel was present beneath the tank area. It was not determined if there was fuel in the left wing auxiliary locker tank.

The aircraft was equipped with an emergency locator transmitter (ELT), which was found in the ARMED position. The ELT batteries had an expiration date of August 2000.

Two zip-lock bags containing a white powder were discovered in the pilot's shaving kit. A third zip-lock bag containing a white powder was discovered in the pilot's wallet. The zip-lock bags and their contents were sent to the Norman Police Department's Criminal Investigations Bureau for analysis.

#### MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy of the pilot was performed by the Office of the Chief Medical Examiner, Oklahoma City, Oklahoma. Toxicological testing performed on the pilot by the FAA's Civil Aeromedical Institute, Oklahoma City, Oklahoma was negative for carbon monoxide, cyanide, and ethanol. The following was discovered: 0.121 (ug/ml, ug/g) Amphetamine detected in blood. 0.419 (ug/ml, ug/g) Amphetamine detected in liver. Amphetamine detected in kidney. 4.595 (ug/ml, ug/g) Methamphetamine detected in blood. 5.34 (ug/ml, ug/g) Methamphetamine detected in liver. 3.715 (ug/ml, ug/g) Methamphetamine detected in kidney. Pseudoephedrine present in blood. Pseudoephedrine present in liver.

#### TESTS AND RESEARCH

On January 10, 2001, the airplane was examined by the NTSB Investigator-In-Charge at Air Salvage of Dallas, Lancaster, Texas. The left engine's (serial number 267104R) oil sump was observed compressed upwards to the camshaft. The propeller was rotated and continuity was established to the accessory gears, and each cylinder exhibited thumb compression. The vacuum pump was removed, and the drive shaft rotated freely when manually turned. The vacuum pump was disassembled and its vanes were intact and it was lubricated. The fuel pump and oil pump were removed and their drive shafts rotated freely when manually turned. The oil pump gear assembly was not worn or damaged. Fuel was present in the fuel pump. The left and right magnetos were removed. Both drive shaft couplings rotated freely when manually turned and each lead produced a spark when the coupling was turned. The fuel manifold was opened and the screen was free from contaminants and fuel was present. The top spark plugs were removed and determined to be RHB-32E, the correct type for the engine. The electrodes appeared moderately worn with moderate deposits (normal). The main fuel screen at the fuel injector was removed and observed free of debris. The turbocharger was examined. The compressor and turbine wheels rotated when turned by hand and a rub mark

was observed at the turbine wheel's shroud.

The right engine's (serial number 267140R) oil sump was compressed upwards to the camshaft. The propeller was rotated and continuity was established to the accessory gears, and each cylinder exhibited thumb compression. The vacuum pump was removed and the drive shaft rotated freely when manually turned. The vacuum pump was disassembled and its vanes were intact and it was lubricated. The fuel pump and oil pump were removed and their drive shafts rotated freely when manually turned. Fuel was present at the inlet line to the fuel pump. The oil pump's gears were not worn or damaged. The left and right magnetos were removed. Both drive shaft couplings rotated freely when manually turned and each lead produced a spark when the coupling was turned. The fuel manifold was opened and the screen was free from contaminants and residual fuel was present. The top spark plugs were removed and exhibited moderate wear and light deposits. The main fuel screen at the fuel injector was removed and observed clean and free of debris. The turbocharger was examined. The compressor and turbine wheels were seized, due to impact damage, and no rub marks were noted.

On December 18, 2000, a Forensic Examiner with the Norman Police Department's Criminal Investigations Bureau weighed and conducted a presumptive test of the contents of the three zip-lock bags that were discovered at the accident site. The contents of the first zip-lock bag had a net weight of 8.98 grams and tested negative for the presence of cocaine HCL, cocaine base, methamphetamine or opiates. The substance is suspected to be a solid dilutant or "cut." The contents of the second zip-lock bag had a net weight of 1.59 grams and tested positive for the presence of cocaine HCL and methamphetamine. The contents of the third zip-lock bag had a net weight of 1.38 grams and tested positive for the presence of cocaine HCL and methamphetamine.

#### ADDITIONAL INFORMATION

The airplane was released to the registered owner on May 3, 2001.

#### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	50, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	08/30/2000
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	10000 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N52KL
Model/Series:	421B 421B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	421B-0254
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	12/10/1999, Annual	Certified Max Gross Wt.:	7450 lbs
Time Since Last Inspection:	48 Hours	Engines:	2 Reciprocating
Airframe Total Time:	5315 Hours	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	GTSIO-520-H
Registered Owner:	PAUL A. VEENKER	Rated Power:	375 hp
Operator:	EARL W. NASH	Operating Certificate(s) Held:	None
Operator Does Business As:	N/A	Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	OUN, 1175 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	0437 CST	Direction from Accident Site:	360°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	0.25 Miles
Lowest Ceiling:	Overcast / 200 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	45° C / 45° C
Precipitation and Obscuration:			
Departure Point:	ALTUS, OK (AXS)	Type of Flight Plan Filed:	None
Destination:	(OUN)	Type of Clearance:	IFR
Departure Time:	0000	Type of Airspace:	Class E

## Airport Information

Airport:	UNIV OF OK WESTHEIMER (OUN)	Runway Surface Type:	Asphalt
Airport Elevation:	1175 ft	Runway Surface Condition:	Dry
Runway Used:	3	IFR Approach:	Localizer Only
Runway Length/Width:	4747 ft / 100 ft	VFR Approach/Landing:	



## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	JASON A RAGOGNA	Report Date:	10/23/2001
Additional Participating Persons:	ROBERT E GIGUERE; OKLAHOMA CITY, OK HENRY D SODERLUND; WICHITA, KS JOHN T KENT; SEAGOVILLE, TX		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).