National Transportation Safety Board
Aviation Accident Final Report

Location:	Columbus, OH	**Accident Number:**	CHI08FA045
Date & Time:	12/05/2007, 0651 EST	**Registration:**	N28MG
Aircraft:	CESSNA 208B	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Fatal
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

The cargo flight was departing on its fourth flight leg of a five-leg flight in night instrument conditions, which included a surface observation of light snow and a broken ceiling at 500 feet above ground level (agl). One pilot who departed just prior to the accident flight indicated that moderate snow was falling and that he entered the clouds about 200 feet agl. The accident airplane's wings and tail were de-iced prior to departure. Radar track data indicated the accident flight was about 45 seconds in duration. An aircraft performance radar study indicated that the airplane reached an altitude of about 1,130 feet mean sea level (msl), or about 400 feet above ground level, about 114 knots with a left bank angle of about 29 degrees. The airplane descended and impacted the terrain at an airspeed of about 155 knots, a pitch angle of -16 degrees, a left roll angle of 22 degrees, and a descent rate of 4,600 feet per minute. The study indicated that the engine power produced by the airplane approximately matched the engine power values represented in the pilot's operating handbook. The study indicated that the required elevator deflections were within the available elevator deflection range, and that the center-of-gravity (CG) position did not adversely affect the controllability of the airplane. The study indicated that the load factor vectors, the forces felt by the pilot, could have produced the illusion of a climb, even when the airplane was in a descent. The inspection of the airframe and engine revealed no anomalies that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain aircraft control and collision avoidance with terrain due to spatial disorientation. Contributing to the accident were the low cloud ceiling and night conditions.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
3. (C) SPATIAL DISORIENTATION - PILOT IN COMMAND
4. (F) LIGHT CONDITION - NIGHT
5. (F) WEATHER CONDITION - CLOUDS
6. (F) WEATHER CONDITION - LOW CEILING

Factual Information

HISTORY OF FLIGHT

On December 5, 2007, at 0651 eastern standard time, a Cessna 208B, N28MG, collided with terrain about one mile east southeast of the Rickenbacker International Airport (LCK), Columbus, Ohio, during takeoff climb from Runway 23R (11,937 feet by 150 feet, asphalt). Ground impact forces destroyed the airplane, which was registered to Avion Capital Corporation and operated by Castle Aviation, Inc. The commercial pilot and a pilot-rated passenger received fatal injuries. The Title 14 Code of Federal Regulations Part 135 cargo flight departed LCK at 0649 en route to the Buffalo Niagara International Airport (BUF), Buffalo, New York. Instrument meteorological conditions prevailed and an instrument flight rules flight (IFR) plan was filed.

The night cargo flight was scheduled for a five-leg trip. The airplane departed on its first flight leg from the Akron-Canton Regional Airport for Hamilton, Ontario, Canada, at 2223 on December 4, 2007, and arrived at 2323. The airplane then departed Hamilton at 0054 on December 5, 2007, for BUF and arrived at 0115. The aircraft departed BUF at 0304 and arrived at LCK at 0453.

The airplane was topped off with 155 gallons of Jet A fuel and loaded with 714 pounds of cargo. The pilot started the airplane's engine about 0640. The pilot taxied to the de-icing ramp, and the wings and tail were de-iced with about 160 gallons of Type I de-icing fluid at 0644. A witness reported that the propeller did not require de-icing. At 0646, the pilot received the taxi clearance to taxi to runway 23R at Delta taxiway.

At 0649, the pilot was cleared for takeoff from runway 23R at Delta taxiway, and then to turn left to a heading of 090 degrees. The pilot acknowledged the takeoff clearance and departed. There were no further radio transmissions from N28MG.

Radar track data indicated that 10 radar returns were recorded of the accident flight, which was about 45 seconds in duration. The radar track data indicated that the airplane climbed to about 1,100 feet mean sea level (msl) in a left turn with a ground speed of about 109 knots, prior to descending and impacting the terrain about one mile east southeast of the airport.

PESONNEL INFORMATION

The 58-year-old pilot held a commercial pilot certificate with single-engine land, multi-engine land, and airplane instrument ratings. He held a second-class medical certificate that was issued in September 2007. The pilot's logbook and duty logs indicated that the pilot's total flight time was about 1,310 hours with about 200 hours flown in the 208B. The pilot's logbook indicated that he had flown about 778 hours in actual instrument conditions.

The pilot's logbooks indicated that he started flight training in October 1997. Castle Aviation hired the pilot in August 2007. His resume and flight time breakdown that he provided to Castle Aviation prior to being hired indicated the following flight experience:

Total Flight Time in Cessna 172 and Piper Turbo Arrow: 1,050 hours.

Instrument Hours: 650 hours.

Cross Country Hours: 700 hours.

Night Flying Hours: 62 hours.

Multi-Engine Hours (Piper Seneca, Cessna 421 and Cessna 425): 60 hours.

A review of the pilot's Federal Aviation Administration (FAA) airman file indicated the dates when the pilot had obtained his pilot's ratings. It also indicated that the pilot had initially been disapproved for three ratings. The airman file indicated the following:

1. On June 25, 1998, the pilot was disapproved for the private pilot single-engine land rating.

2. On July 9, 1998, the pilot received the private pilot single-engine land rating.

3. On March 23, 1999, the pilot was disapproved for the instrument airplane rating.

4. On March 27, 1999, the pilot received the instrument airplane rating.

5. On May 21, 2000, the pilot received his commercial pilot certificate with airplane single engine land and airplane instrument ratings.

6. On June 25, 2006, the pilot received his commercial certificate with the multi-engine land rating.

7. On August 10, 2007, the pilot was disapproved for the certified flight instructor (CFI) - airplane single engine land rating.

The president of Castle Aviation reported that he was not aware that the accident pilot had not passed the FAA CFI flight test prior to hiring the pilot. Castle Aviation company records indicated that the pilot started his ground school and flight training in August 2007. The pilot completed 34 hours of ground school training on October 1, 2007. The pilot completed the Cessna Aircraft Company's "Caravan Cold Weather Ops On-Site Program" on October 22, 2007. The pilot passed the Pilot-in-Command (PIC) check ride for "VFR Duties Only" on October 22, 2007, and had logged about 63.8 hours of flight time in the 208B. The pilot passed the Part 135 Instrument Proficiency check ride on November 20, 2007, and had logged about 151 hours of flight time in the 208B. As a result of passing the instrument proficiency check ride, the pilot was authorized to perform the duties of PIC in instrument meteorological conditions. He logged about 33.9 additional hours of flight time as PIC prior to the accident, of which 12.5 hours were logged as actual instrument conditions and 32.5 hours were logged as night conditions.

AIRCRAFT INFORMATION

The single-engine Cessna 208B, serial number 208B0732, was manufactured in 1999. It had seating for two and was configured for cargo operations. The maximum gross takeoff weight of the airplane was 8,750 pounds. The engine was a flat rated 675 shaft horsepower Pratt & Whitney PT6-114A engine. The aircraft was maintained on the factory Cessna Phase Card Inspection Program. The last inspection was performed on November 16, 2007, at 9,896.6 hours and 8,889 airframe cycles and consisted of a Mini Check. The engine had 3,897 hours and 3,412 cycles since overhaul as of November 16, 2007. The aircraft total time at the time of the accident was estimated to be 9,936 hours and 9,033 cycles.

A review of the Airworthiness Directives (AD's) was performed. No discrepancies were noted. Particular attention was given to AD's related to operation in icing conditions and all AD's had been complied with.

The airplane was fueled with 155 gallons of Jet-A fuel from Truck 7. A fuel sample was taken from Truck 7 and it was clean and clear with no indication of water.

The airplane was deiced from truck ICE1 at 0644. The truck supplied heated Type I fluid only. The wings were sprayed with about 100 gallons of fluid and the tail was sprayed with about 60 gallons. A sample was taken and it passed the refractive index test.

A FAA inspector examined whether the accident airplane was within weight and balance limitations at takeoff. Post accident, the freight was unloaded and weighed. The manifest weight was 714 pounds. The actual weight on reweigh was observed to be 704 pounds, plus the 10-pound hazardous material package. This would equal the provided weight of 714 pounds at the time of departure. AirNet (the cargo provider) stated that all of the material had been recovered. This was further determined to be true by comparing the air bills recovered to the air bills known to be on board. No manifest was found at the accident site, although a number of documents normally kept on the top of the aluminum clipboard ("the can") were not located. A weight and balance form for the accident flight was not located.

Weight and balance computations were performed using four different scenarios. All four scenarios used the following as a standard:

1. 2,200 pounds of fuel.

2. Aircraft weight of 4,466 pounds.

3. Pilot and Jumpseater – 400 pounds.

4. 25 pounds of baggage in zone 5

5. 100 pounds (pallet rollers, tail stand, straps) in zone 6.

6. 10 pound hazmat package in zone 5.

This created a total weight of 7,905 pounds. The Cessna 208B has a maximum allowable gross take-off weight of 8,750 pounds.

The freight scenarios were as follows:

1. 704 pounds of freight located entirely in zone 6. The aircraft was within center of gravity (CG).

2. 704 pounds of freight located in zone 1. The aircraft was out of forward CG.

3. Freight split of 374 pounds in zone 1 and 330 pounds in zone 2. The aircraft was slightly out of forward CG.

4. Freight split of 374 pounds in zone 2 and 330 pounds in zone 3. The aircraft was within CG limits.

METEOROLOGICAL CONDITIONS

At 0638, the observed weather at LCK was: Wind 080 degrees at 5 knots, visibility 1 3/4 statute miles, ceiling broken 500 feet, overcast 1,700 feet, temperature - 1 degree Celsius (C), dew point - 2 degrees C, altimeter 29.61 inches of mercury.

At 0645, the observed weather at LCK was: Wind 090 degrees at 4 knots, visibility 1 3/4 statute miles, light snow, ceiling broken 500 feet, overcast 1,700 feet, temperature - 1 degree C, dew point - 2 degrees C, altimeter 29.61 inches of mercury.

At 0701, the observed weather at LCK was: Wind 080 degrees at 5 knots, visibility 1 statute miles, light snow, ceiling overcast 500 feet, temperature - 1 degree C, dew point - 2 degrees C,

altimeter 29.61 inches of mercury.

Four airplanes departed LCK prior to the accident occurring. At 0627, a Beech Baron departed. The pilot reported that he deiced twice before departing. He reported that he did not pick up any ice while he was on the ground. He reported visibility as 1 1/2 to 2 miles and he entered instrument conditions about 300 to 400 feet above ground level (agl). He did not accumulate any ice until reaching 3,000 feet msl.

At 0639, another Beech Baron departed. The pilot reported that there was light snow during takeoff. He entered the clouds about 800 - 1,000 feet agl. He did not pick up ice until reaching 6,000 feet msl.

At 0641, a Cessna 208 departed. He estimated the visibility as 3 - 4 miles. He picked up a trace amount of ice at approximately 1,000 feet agl, but did not enter instrument conditions until about 5,000 feet msl.

At 0645, a Piper PA-31 departed. The pilot reported that he entered clouds about 200 feet agl. He reported that it was snowing moderately the whole time.

WRECKAGE AND IMPACT INFORMATION

The airplane impacted terrain on an approximate heading of 120 degrees. The debris field was about 775 feet long. A ground scar that was consistent with two wheel imprints in the soft soil characterized the initial impact point. The longest wheel imprint was about 6 feet in length. A section of the nose gear fairing was found lodged at the end of the ground scar. The nose gear and left main landing gear were sheared from the airplane and found near the initial impact point. The second ground scar located in the debris field was about 627 feet from the initial impact point. The left wingtip red navigation light was found in the second ground scar. The outboard section of the left wing about 7 feet in length had separated from the rest of the left wing and was found near the second ground scar. The main body of the wreckage came to rest inverted on an abandoned concrete foundation surrounded by brush and small trees about 762 feet from the initial impact point. The fuselage sustained compression damage to the top of the aircraft. The left wing was bent back and penetrated the fuselage. There was no post-impact fire.

Inspectors from the FAA arrived at the accident site at 1045, about 4 hours after the accident occurred. The weather conditions when they arrived were: overcast ceiling at 1,000 feet agl, temperature -1 degree C, and dew point - 2 degrees C. The inspectors examined that airplane's wing and tail surfaces for ice accumulation. The inspection revealed that about one and one-half inches of snow had accumulated on the upper surfaces of the inverted airplane since the accident. The horizontal stabilizer leading edge surfaces were free of "glazed" or clear ice. A light, amber colored fluid mixed with loose snow was noted along the right horizontal stabilizer leading edge. The color of the fluid/snow mixture was consistent with a sample of the Type 1 aviation de-icing fluid used during de-icing procedures. The left and right wing leading edges were free of ice. No snow discoloration was noted on the wing as was noted on the tail. The rudder was free of frozen contaminants, other than light surface snow. There was no evidence of any "streaking" of any wing, tail, or fuselage surfaces from fluid run-off. No clear ice was evident on the leading edges of the propeller blades. The inspection of the cockpit revealed that the windshield anti-ice and the propeller de-ice switches were destroyed.

The inspection of the flight control cables revealed that the elevator and rudder cables exhibited continuity from the control surfaces to the aft fuselage. The right aileron cable

exhibited continuity from the control surface to the right wing root area. The left aileron control cable continuity was established from the left aileron, through separations, to the left wing root area. The cable separations were consistent with tension overload signatures.

The elevator trim actuators measured 1.5 inches, which equates to 14 degrees trim tab down. The right aileron trim actuator measured 1.9 inches, which equates to 0 degrees. The fixed left aileron trim actuator was impact damaged and could not be measured. The flap actuator jackscrew measured 6.7 inches, which equates to the flaps being in the fully retracted position.

The left and right control yokes were found separated from the control column. The right handle of the left yoke was broken, and the right yoke handles remained intact.

The engine was disassembled for inspection in a hangar at LCK. The engine exhibited contact signatures to the compressor 1st stage blades and shroud, the compressor turbine guide vane ring, the compressor turbine, the power turbine guide vane ring, the power turbine shroud, and the power turbine. The reduction gearbox 1st stage flex coupling spline was fractured in torsion due to impact loads. The contact signatures were consistent with the engine producing power at the time of ground impact. The inspection of the engine revealed no anomalies that would have precluded normal engine operation.

The propeller blades were examined visually on-site and they exhibited bending, twisting, and leading edge impact damage. The propeller was sent to the propeller manufacturer for inspection. The inspection revealed that two blades had smooth forward blade bending with decrease pitch tip twisting. The entire pitch change mechanism had become disconnected.

The starter generator and alternator were removed from the engine and examined under the supervision of an FAA airworthiness inspector. The starter generator was rotated at 2,800 RPM and produced approximately 29 volts. A 50-ampere load was applied to the starter generator and it produced 50 amperes. The alternator was tested and it produced approximately 28 volts. No load capability could be determined due to the alternator field circuit being shorted to the case ground.

Four instruments from the pilot's instrument panel were removed for inspection. The altimeter, vertical speed indicator, airspeed indicator, and the turn coordinator were inspected at an avionics facility. The turn coordinator operated when power was applied. Impact damage to the other instruments precluded any reliable information from being displayed.

The airplane was equipped with an Altair engine monitoring system. The data was downloaded, but due to the version of the software, the significance of the data was limited.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot at the Montgomery County Coroner's Office, Dayton, Ohio, on December 6, 2007. The cause of death was "Multiple blunt force injuries." A Forensic Toxicological Fatal Accident Report was prepared by the FAA Civil Aeromedical Institute. Atenolol was detected in the blood and urine, and naproxem was detected in the urine.

The pilot's 72-hour history prior to the accident did not indicate any personal issues that would be a concern to safe flight operations.

TESTS AND RESEARCH

The National Transportation Safety Board's Office of Research and Engineering conducted an Aircraft Performance Radar Study. The Study presented the results of using Airport

Surveillance Radar (ASR) data, crash site information, and a validated simulator model of the Cessna 208B as the basis for a six degree-of-separation (6-DOF) simulation. The simulation provided a physics-based estimate of the position and orientation of the airplane throughout the accident flight. The following aircraft performance observations were based on the results of this simulation.

The airplane was first detected by radar at 06:49:54 as it was climbing at about 500 ft/min through about 800 ft msl (70 ft agl), on a track of about 223 degrees true, and accelerating through 83 knots calibrated airspeed (KCAS). The airplane continued accelerating to about 114 KCAS while climbing at about 500-700 ft/min to an altitude of about 1,130 ft msl, or about 400 ft agl. At about 06:50:13, while climbing through 920 ft msl (190 ft agl), the airplane started a slow roll to the left, reaching a bank angle of about 29 degrees at about 06:50:32. During the left turn, at about 06:50:27, the pitch angle started to decrease, and at 06:50:32 the airplane reached its maximum altitude (1,130 ft msl) and started to descend. During the descent, the left roll angle decreased from 29 degrees to about 22 degrees, while the airspeed increased from about 114 KCAS to about 155 KCAS. The airplane impacted terrain at about 06:50:43. At impact, the simulation results indicated an airspeed of 155 KCAS, a pitch angle of -16 degrees, a left roll angle of 22 degrees, and a descent rate of 4,600 ft/minute.

The engine power in the simulation was set to approximately match the pilot operating handbook (POH) torque limit with the inertial separator and cabin heat on. The actual torque obtained in the simulation was about 2.7 percent higher than this limit, and lies between the torque limits for the cabin heat on and off (with the inertial separator on). Therefore, the power computed by the simulation was representative of the power present on the accident flight.

To evaluate the effect of three cargo loading cases, including two where the airplane CG was up to 3.8 inches forward of the forward limit, the simulation was repeated for each CG position. There was a about a 3 degree offset in the elevator positions between the most forward and aft CG cases, and in all three cases, the required elevator deflections were well within the available elevator deflection range. These results indicated that the CG position did not adversely affect the controllability of the airplane.

The load factors output by the simulation were used to compute “apparent” pitch and roll angles, defined as the angles that make the load factor vector in an unaccelerated reference system parallel (in airplane body axes) to the load factor vector in the actual accelerated reference system. These angles represent the attitude a pilot would “feel” the airplane to be in, based on his vestibular/kinesthetic perception of the components of the load factor vector in his own body coordinate system. Throughout the flight, the apparent roll angle was close to zero, and the apparent pitch angle was always greater than zero – even when the real pitch angle was as low as -15 degrees. This suggests that conditions that could have produced a somatographic illusion of a climb, even when the airplane was in a descent, may have been present during the accident flight.

ADDITIONAL INFORMATION

The president of Castle Aviation, who also flew as a line pilot for the company, reported that he met the accident pilot at the Ultimate Air Center located at Canton-Akron Regional Airport (CAK), Akron, Ohio, about 2100 on December 4, 2007. He reported that he and the accident pilot discussed the expected weather conditions that would be encountered that night. For

about 35 minutes they discussed how to handle snow and icing conditions while flying at night. He reported that the accident pilot was "very positive and loved what he was doing." He told the accident pilot to not take any chances and to call him, the chief pilot, or the director of maintenance if he had any questions or concerns.

A Castle Aviation pilot reported that he met and talked with the pilot around 0430 on December 5, 2007, while they were waiting for their airplanes to be loaded and serviced at LCK. He reported that they discussed weather and icing conditions. The accident pilot did not indicate that the airplane had any mechanical problems. Both pilots were scheduled for departures around 0515, but were delayed due to the weather and de-icing operations. He reported that his airplane, N27MG, was de-iced first and he taxied for takeoff. But while taxiing, his aircraft got stuck in some snow off the edge of the pavement. By the time his airplane was towed out of the snow, about 1/4 to 3/8 inch of ice had accumulated on his propeller. He reported that the accident pilot taxied by him in N28MG after it had been de-iced. He reported that he heard N28MG depart. He reported that the sound of the propeller on N28MG did not sound normal and was producing a "distorted oscillation" sound.

The personnel who were conducting the de-icing operations reported that N28MG had about 2 inches of snow accumulation when they started to de-ice it. Approximately 100 gallons of de-icing fluid were applied to the wings and 60 gallons were applied to the tail. One of the de-icing personnel reported that he had checked the propeller for ice with his hand and the propeller did not require de-icing. They reported that the pilot remained in the airplane while the airplane was de-iced, and did not get out of the airplane before departing.

Pilot Information

Certificate:	Commercial	**Age:**	58, 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 2 With Waivers/Limitations	**Last FAA Medical Exam:**	09/27/2007
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	11/21/2007
Flight Time:	1310 hours (Total, all aircraft), 200 hours (Total, this make and model), 197 hours (Last 90 days, all aircraft), 83 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	**Registration:**	N28MG
Model/Series:	208B	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	208B-0732
Landing Gear Type:	Retractable - Tricycle	**Seats:**	2
Date/Type of Last Inspection:	11/16/2007, 100 Hour	**Certified Max Gross Wt.:**	8750 lbs
Time Since Last Inspection:	40 Hours	**Engines:**	2 Turbo Prop
Airframe Total Time:	9936 Hours at time of accident	**Engine Manufacturer:**	Pratt & Whitney Canada
ELT:	Installed, not activated	**Engine Model/Series:**	PT6A-114A
Registered Owner:	Avion Capital Corp.	**Rated Power:**	hp
Operator:	Castle Aviation LLC	**Operating Certificate(s) Held:**	On-demand Air Taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	**Condition of Light:**	Dusk
Observation Facility, Elevation:	LCK, 744 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	0638 EST	**Direction from Accident Site:**	330°
Lowest Cloud Condition:		**Visibility**	1.75 Miles
Lowest Ceiling:	Overcast / 500 ft agl	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	80°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.61 inches Hg	**Temperature/Dew Point:**	-1°C / -2°C
Precipitation and Obscuration:			
Departure Point:	Columbus, OH (LCK)	**Type of Flight Plan Filed:**	IFR
Destination:	Buffalo, NY (BUF)	**Type of Clearance:**	IFR
Departure Time:	0649 EST	**Type of Airspace:**	

Airport Information

Airport:	Rickenbacker International (LCK)	**Runway Surface Type:**	Asphalt; Concrete
Airport Elevation:	744 ft	**Runway Surface Condition:**	Snow
Runway Used:	23L	**IFR Approach:**	None
Runway Length/Width:	12102 ft / 200 ft	**VFR Approach/Landing:**	None

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:**	39.788333, -82.940278

Administrative Information

Investigator In Charge (IIC):	James P Silliman	**Report Date:**	03/05/2009
Additional Participating Persons:	David Fraser; FAA-Columbus FSDO; Columbus, OH Peter Basile; Cessna Aircraft Company; Wichita, KS Thomas Berthe; Pratt & Whitney Canada; Burlington, VT Michael Grossmann; Castle Aviation; Akron, OH Tom Schaner; Air Net; Columbus, OH		
Publish Date:	08/17/2012		
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.ntsb.gov/pubdms/.		