



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Ashwaubenon, WI	<b>Accident Number:</b>	CHI01FA111
<b>Date &amp; Time:</b>	04/02/2001, 1629 CDT	<b>Registration:</b>	N405PC
<b>Aircraft:</b>	Cessna 501	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal, 3 Serious, 4 Minor

**Flight Conducted Under:** Part 91: General Aviation - Ferry

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## Analysis

At 1623:41, the pilot requested taxi clearance. The Green Bay (GRB) tower (ATCT) told the pilot to taxi to runway 18. At 1626:47 the pilot said that he was ready for takeoff. The ATCT local controller (LC) told the pilot, "proceed on course, cleared for takeoff". At 1627:33, radar showed the airplane began to accelerate down runway 18. At 1628:17 the LC told the pilot to contact departure control. The pilot responded, "ah papa charlie we have a little problem here we're going to have to come back." The LC asked the pilot, "what approach would you like?" The pilot responded, "like to keep the vis." At 1628:35, the LC asked the pilot, "like the contact approach that what you're saying?" There was no response from the pilot. At 1628:50, GRB radar showed the airplane on a heading of 091 degrees, at an altitude of 855 feet msl (160 feet agl), and at an airspeed of 206 knots. The airplane was 1.28 miles southeast of the airport radar. Radar contact with the airplane was lost at 1628:55. A witness to the accident said, "It was snowing moderately at that time. The road was wet but not slippery. Crossing the intersection of Morning Glory Rd. & Main St., I noted a white private jet flying from the south. It was flying at approximately a 75-80 degree angle perpendicular to the ground with its left wing down & teetering slightly." The witness said, "It then crossed Main Street with the lower wing tip approximately 20 to 30 feet above the power wires. The plane became more perpendicular to the ground at a 90 degree angle with the left wing down & (and) lost altitude crashing into the Morning Glory Dairy warehouse building." An examination of the airplane revealed no anomalies. At 1638, GRB weather was reported as ceilings of 200 feet broken, 800 feet overcast, visibility 1/2 statute mile with snow and fog, temperature 32 degrees F, dew point 32 degrees F, winds 120 degrees at 3 knots, and an altimeter setting of 29.99 inches Hg. Witnesses at the FBO said the pilot arrived to pick up the airplane after 1600. The pilot was briefed by the mechanic as he did his walk around inspection of the airplane. The pilot then got into the airplane. The airplane was towed out and the tow bar removed. About two minutes later, the engines started. Less than five minutes after the engines started, the airplane taxied. The NTSB Audio Laboratory reviewed radio communications between ATCT and the pilot to determine from the speech evidence the pilot's level of psychological stress and workload. The examination indicated the pilot's speech characteristics were consistent with an increased stress/workload that might accompany a developing emergency. Referring to the

pilot's final transmissions, "His unusually long reaction time suggests that he was distracted by competing cockpit priorities and/or was having a difficult time determining his answer, while his fast speech and microphone keying provide further evidence of an urgency to return to other cockpit activities." The report states that the pilot's statements remained rational and showed good word choice and grammar. "These factors, along with the relatively small change in fundamental frequency, suggest that the pilot did not reach an extreme level of stress."

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot not maintaining aircraft control while maneuvering after takeoff and the pilot's inadequate preflight planning and preparation. Factors relating to the accident were the pilot's diverted attention while maneuvering after takeoff, the pilot's attempted VFR flight into instrument meteorological conditions, the pilot's visual lookout not being possible, the low ceiling, snow, and fog, the airplane's low altitude, and the building.

### Findings

Occurrence #1: UNDETERMINED

Phase of Operation: TAKEOFF - INITIAL CLIMB

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Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: MANEUVERING

Findings

1. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
2. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. (F) DIVERTED ATTENTION - PILOT IN COMMAND
4. (F) VFR FLIGHT INTO IMC - ATTEMPTED - PILOT IN COMMAND
5. (F) VISUAL LOOKOUT - NOT POSSIBLE - PILOT IN COMMAND
6. (F) WEATHER CONDITION - LOW CEILING
7. (F) WEATHER CONDITION - SNOW
8. (F) WEATHER CONDITION - FOG

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Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: MANEUVERING

Findings

9. (F) OBJECT - BUILDING(NONRESIDENTIAL)
10. (F) ALTITUDE - LOW

## Factual Information

### HISTORY OF FLIGHT

On April 2, 2001, at 1629 central daylight time, a Cessna 501, N405PC, operated by an airline transport pilot was destroyed when maneuvering on initial climb after takeoff, it impacted into the southwest wall of the Morning Glory Dairy cold storage facility in Ashwaubenon, Wisconsin. A post impact explosion and fire ensued. The cold storage facility was destroyed and an adjacent dairy production plant sustained minor damage. Instrument meteorological conditions prevailed at the time of the accident. The ferry flight was being operated on an instrument flight rules flight plan under the provisions of Title 14 CFR Part 91. The pilot was fatally injured. Seven employees in the Morning Glory Dairy cold storage facility were injured. Four of the employees sustained minor injuries. Three of the employees sustained serious injuries from burns. The cross-country flight originated at the Austin-Straubel International Airport (GRB), Green Bay, Wisconsin, at 1627, and was en route to Ft. Myers, Florida.

At 1615:17, the pilot contacted GRB air traffic control tower (ATCT) and requested clearance to Southwest Florida International Airport (RSW), Ft. Myers, Florida. The ground controller (GC) told the pilot, he was cleared to RSW as filed, climb and maintain 3,000 feet mean sea level (msl), expect flight level 370, one-zero minutes after takeoff, departure frequency 119.4 Megahertz, and transponder code 2673. The pilot read back the clearance, "four zero five papa charlie cleared as filed three thousand three seven zero in ten one nineteen four two six seven three."

At 1623:41, the pilot told the GRB ATCT GC, "and ground citation four zero five papa charlie with ah [ATIS (automatic terminal information service) information] whiskey ready to taxi, like [runway] one eight (8,200 feet by 150 feet, wet concrete) if we could." The GC told the pilot to taxi to runway 18.

At 1626:47 the pilot told the GRB ATCT local controller (LC) that he was ready to takeoff on runway 18. The LC told the pilot, "citation four zero five papa charlie green bay tower runway one eight proceed on course cleared for takeoff".

At 1627:33, GRB radar, located on the airport, showed the airplane began to accelerate down runway 18.

At 1628:17 the LC told the pilot, "citation five papa charlie contact departure have a good day." The pilot responded, "ah papa charlie we have a little problem here we're going to have to come back."

In his written statement, the LC said that the airplane was out of his sight when he told the pilot to contact departure control.

At 1628:27, the LC asked the pilot, "roger and what approach would you like?" The pilot responded, "like to keep the vis."

At 1628:35, the LC asked the pilot, "like the contact approach that what you're saying?" There was no response from the pilot.

The LC said, "I then saw a radar return on the brite scope southeast of the airport."

At 1628:42, GRB radar showed the airplane in a left turn heading 135 degrees, at an altitude of

1,055 feet mean sea level (msl), (approximately 360 feet above ground level - agl) and an airspeed of 182 knots. The airplane was approximately 1 mile south of the airport.

At 1628:46, GRB radar showed the airplane on a heading of 113 degrees, at an altitude of 955 feet msl, (approximately 260 feet agl) and at an airspeed of 193 knots.

At 1628:50, GRB radar showed the airplane on a heading of 091 degrees, at an altitude of 855 feet msl, (approximately 160 feet agl) and at an airspeed of 206 knots. Radar contact with the airplane was lost at 1628:55.

At 1628:53, the LC transmitted, "zero papa charlie you still have the airport in sight?"

At 1629:18, the LC transmitted, "citation zero papa charlie can you hear?"

A witness to the accident said she was traveling east on Main Street toward the Morning Glory Dairy. "It was snowing moderately at that time. The road was wet but not slippery. Crossing the intersection of Morning Glory Rd. & Main St., I noted a white private jet flying from the south. It was flying at approximately a 75-80 degree angle perpendicular to the ground with its left wing down & teetering slightly. I first noticed the plane as it approached Main Street flying at that angle just south of & between Fitzgerald's and the Hilltop Auto Repair shops. It then crossed Main Street with the lower wing tip approximately 20 to 30 feet above the power wires. The plane became more perpendicular to the ground at a 90 degree angle with the left wing down & lost altitude crashing into the Morning Glory Dairy warehouse building."

Several other witnesses also saw the airplane prior to the accident. One witness at a lumber yard northwest of the crash site saw the airplane approach from the south. This witness reported, "The plane was very low and banked steeply to the left."

One witness at a truck company on Main Street said he saw the airplane come around the back of a building about 100 feet off the ground. This witness reported, "The plane was sideways about 50 yards away from our van bodies in the back. The plane was going at a good rate of speed. Then we heard it hit the building across the street." Another witness at the same location said he heard a loud bottle rocket-type sound. He looked up in the sky and saw "a white Lear jet." The witness said the airplane was "tilted almost 90 degrees." The witness said he saw the airplane crash into the side of the dairy. He said he felt and saw the explosion and immediately saw lots of smoke.

## AIRCRAFT INFORMATION

The airplane was privately owned and operated for business and pleasure. Fixed base operator (FBO) repair station records indicated the airplane had 5,856.8 hours total airframe time. The airplane's owner said that he last flew the airplane from Springfield, Illinois, to GRB, in March 2001 (the owner's son confirmed the date of the flight as March 14, 2001). The owner said he filed his flight plan expecting to fly the ILS approach into the airport. At the time he filed his flight plan, the weather at GRB was a 200-foot ceiling and 1/2 mile visibility. He said that the weather at GRB was better when he arrived so he didn't fly the complete approach. The owner said that he brought the airplane to GRB to have routine inspections performed and to have some discrepancies fixed. The owner said that a body fuel tank installed several months earlier was experiencing an intermittent fuel leak and there was a problem with the autopilot. In altitude hold mode, the autopilot would porpoise the airplane.

According to repair station mechanics and repair facility work orders, phase 1, 2, 3, 4, and 48 inspections were performed on the airplane between March 14 and March 28. One mechanic said they corrected several discrepancies that were identified to them. This mechanic said, "There was an autopilot pitch up problem." He said the autopilot pitch drive, vertical gyro, and autopilot computer were removed and sent to an avionics repair facility in Lincoln, Nebraska, to be inspected and if necessary, overhauled. Avionics repair facility records showed that the vertical gyro rotor was failing. The defective parts were replaced and the gyro was calibrated, inspected, and returned. The mechanic said that when they got the units back, they reinstalled them in the airplane. The mechanic said they ran the airplane's systems up and checked them. He recalled checking the autopilot system twice. All of the systems functioned normally.

#### PERSONNEL INFORMATION

The pilot held an airline transport pilot certificate with a multiengine land rating and Cessna 500 type rating, and with commercial privileges for single engine land and sea airplanes, issued on November 6, 1992. According to Federal Aviation Administration (FAA) aeromedical records, the pilot reported having 4,500 total flying hours at his most recent physical examination on September 22, 2000. The pilot also reported having flown 150 hours in the 6 months prior to the examination.

An examination of copies of the pilot's logbook showed the pilot had 4,547.8 total flying hours. The logbook record showed the pilot had 3,567.2 hours as pilot in command, 244.6 hours in a Cessna 501, and 205.8 hours as pilot in command in a Cessna 501. The pilot completed a Cessna 550 simulator checkride on April 26, 2000. The logbook record also showed the pilot completed Cessna 650 recurrency training on February 27, 2001.

The pilot held a second class medical certificate with limitations, "Must have glasses available, available for near vision", dated September 22, 2000.

According to the pilot's wife, she and her husband left their home in Key West, Florida, on the morning of the accident at approximately 0700 eastern daylight time to go to the airport. They flew 170 miles from Key West to Fort Myers. The pilot's wife said that the fixed base operator gave the pilot a ride to the terminal. The pilot's wife said that the pilot was in good health. She said he did not use drugs, did not smoke or drink alcohol, had no trouble sleeping, and had no money problems.

#### METEOROLOGICAL CONDITIONS

At 1556, GRB weather was reported as ceilings of 600 feet broken, 1,200 feet overcast, visibility 3/4 statute miles with light snow and mist, temperature 34 degrees Fahrenheit (F), dew point 32 degrees F, winds 160 degrees at 5 knots, and altimeter setting of 29.99 inches of Mercury (Hg).

At 1638, GRB weather was reported as ceilings of 200 feet broken, 800 feet overcast, visibility 1/2 statute mile with snow and fog, temperature 32 degrees F, dew point 32 degrees F, winds 120 degrees at 3 knots, and an altimeter setting of 29.99 inches Hg.

A review of security camera videotape taken from a lumberyard located approximately 720 feet west-northwest of the Morning Glory Dairy cold storage facility showed poor weather conditions prevailed within an hour of, and through the time of the accident. The videotape showed activity from four different camera locations. A date-time stamp was located in the

upper-left corner of the screen. The videotape contained several hours of images. The videotape review was begun with the date-time stamp showing the date as 04/02/01 and the time as 1530:11. There was no camera image in the upper left quadrant. The lower left quadrant videotape images were of a warehouse entrance. The images shown in the upper right quadrant (camera 2) of the videotape were of an outdoor parking lot. The images shown in the lower right quadrant (camera 4) of the videotape were of an outdoor lumberyard. The images from cameras 2 and 3 were stationary the entire time. Camera 4 was adjustable and would pan left and right, and zoom in and out. The images in camera 2 showed light snow flurries began to fall at 1535. The snow intensified slightly at 1600 and continued through the end of the videotape at 1656:40. The images in camera 4 initially showed stacks of lumber up close. At 1538, camera 4 panned right to show the lumberyard. In these images, the pavement was observed to be wet. The outline of wooded areas and building structures could be faintly seen in the distance. The sky conditions were overcast. Camera 4 images showed light snow at 1553. At 1614, camera 4 panned right and then pulled back to show another part of the lumberyard. In these images the pavement was wet and the structures in the distance were faint. At 1629:05, smoke began to show in the upper right side of the camera 4 image. Camera 4 panned right and stopped to show heavy smoke and fire coming from a building. The building outline was very faint. The smoke continued to intensity until it filled the frame. The smoke images continued to be recorded by camera 4 until the end of the videotape.

#### WRECKAGE AND IMPACT INFORMATION

The National Transportation Safety Board (NTSB) on-scene investigation began at 2315.

The airplane struck the roof and southwest wall of the Morning Glory Dairy cold storage facility at 3399 South Ridge Road in Ashwaubenon. The airplane penetrated through the building's roof and interior storage racks on an approximate magnetic heading of 030 degrees. The impact and subsequent explosion resulted in the airplane's fragmentation and destruction of the 40,000 square foot, 3-story building.

The airplane's main wreckage came to rest in several locations on the floor of the cold storage facility. The majority of the airplane's main wreckage came to rest at the foot of dairy storage system rack row A, approximately 127 feet from where the airplane impacted the facility's southwest wall (see wreckage diagram). The main wreckage consisted of the airplane's nose section, cabin section, tail cone, left engine, horizontal stabilizer, portions of the right wing, and inboard section of the left wing. The remainder of the airplane's structure, with exception of the vertical stabilizer and top portion of the rudder, was scattered throughout the south and west parts of the facility. The centrifugal compressor from the left engine was found imbedded in an vertical air duct on top of an adjacent building, approximately 200 feet northeast of the cold storage facility. Several small pieces of airplane structure and engine components were found in the dairy's parking lot, north and northeast of the facility, within a 250-foot radius.

The airplane's nose section, from the nose cone aft to fuselage station (FS) 94.0, to include the radar antennae, nose equipment bay, baggage section, and nose gear wheel well were broken aft, fragmented, charred, and melted. The nose gear was broken aft and fragmented. The nose gear doors were broken out, charred, and melted.

The cockpit section, beginning at the forward pressure bulkhead (FS 94.0) was crushed and broken aft, fragmented, charred, and melted. The instrument panel was fragmented, charred, and melted. Flight, engine, and navigation instruments were broken out, crushed, charred,

melted, and consumed by fire. The control yokes, rudder pedals, center console, and pilot seats were broken out and charred. The glareshield, and the pilot and copilot front and side windows were broken out and consumed by fire.

The airplane's fuselage, beginning aft of the pilot seats to the aft cabin bulkhead at FS 304.0, was broken aft, fragmented, charred, and melted. The main cabin door at FS 187.0 was broken out, fragmented, and charred. The bottom portion of the door was consumed by fire. The door latch was found in the closed and locked position. The right side emergency window hatch was broken out, fragmented, and consumed by fire. The cabin windows were broken out and consumed by fire. The cabin seats were broken out from the floor. The seat cushions were consumed by fire. The seat frames were twisted, and fragmented, charred, and melted. The cabin floor was broken aft, fragmented, and charred. The cabin floor, carpet, and interior walls and ceiling were consumed by fire.

The airplane's left wing was broken aft, crushed, fragmented, charred, and melted. The inboard wing section between wing station (WS) 36.0 and WS 145.75 was crushed aft, charred, and melted. The left flap was broken out and consumed by fire. The top and bottom speed brakes were broken out, charred, and melted. The outboard wing section was crushed aft, charred and melted. The left aileron was crushed aft and consumed by fire. The left aileron bellcrank was charred and melted. Aileron control cables were fragmented and charred. Cable fragments were unraveled at the fractures. Flight control continuity to the left aileron was confirmed.

The left main landing gear and a 7-foot section of the center wing carry-through spar were suspended in the upper level of the dairy storage rack, forward and above the airplane main wreckage. The gear and spar section were charred and melted.

The airplane's right wing was broken aft, fragmented, charred, and melted. The right main landing gear and gear door were broken out. The main landing gear uplocks were broken out and charred. The right flap was broken out, bent upward, charred, and melted. The top and bottom speed brakes were broken out, charred, and melted. The right aileron was broken out and consumed by fire. The right aileron bellcrank and control cables were broken out, fragmented, and charred. Cable fragments were unraveled at the fractures. Flight control continuity to the right aileron was confirmed.

The airplane's aft fuselage from FS 304.0 to FS 383.5 was broken open, fragmented, charred, and melted. The airplane's tail cone was broken laterally at FS 383.5. It was broken open and charred. The engine fire bottles were broken out and charred. The oxygen cylinder was broken out, charred, and expended. The hydraulic system reservoir was broken out, crushed, charred, and melted. Hydraulic lines were fragmented and crushed. The engine control cables were broken out, fragmented, and charred. Cable fragments were unraveled at the fractures. Pneumatic tubing was broken out, fragmented, and charred.

The left engine and pylon were broken aft and outward. The engine cowling was broken aft, fragmented, charred, and melted. The engine pylon was bent outward, charred, and melted. The left engine thrust reverser was broken out, charred, and melted. The engine tail cone was broken laterally, crushed, and melted. The engine compressor section was broken out, fragmented, and charred. The remaining engine was crushed, charred, and melted.

The right engine was broken aft. The right engine pylon was broken aft, charred, and melted.

The tail cone was broken laterally and crushed. The thrust reverser was broken aft, crushed, charred, and melted. The engine cowling was broken aft, charred, and melted. The right engine was bent inward and aft at the combustion and turbine sections. The remainder of the engine was charred and melted.

The airplane's horizontal stabilizers were broken aft, crushed and fragmented, charred, and melted. The left elevator was broken out at the hinges. The outboard section of the elevator was bent upward, crushed, and twisted aft. The entire surface was charred and melted. The right elevator was broken out, fragmented, charred, and melted. The elevator trim tab was broken out and bent. Control continuity to the elevators was confirmed.

The vertical stabilizer and upper part of the rudder was located beneath a 30-foot section of wall, approximately 25 feet southwest of the southwest wall of the cold storage facility. The vertical stabilizer and rudder were broken aft longitudinally, crushed aft, charred, and melted. The rudder trim tab was broken out at the hinges, crushed aft, and bent. The lower portion of the rudder was found beneath a portion of the collapsed roof of the cold storage facility. It was broken longitudinally at water line 165.0, charred, and melted. Control continuity to the rudder was confirmed.

The airplane's engines, and copilot's attitude indicator gyro and case were retained for further examination.

#### TESTS AND RESEARCH

The copilot's attitude indicator was examined at the NTSB North Central Regional Office, Aviation, West Chicago, Illinois, on April 20, 2001. The indicator case was charred by fire. The vacuum and electrical connectors were burned away. The front of the indicator case was crushed inward. The glass face and front portion of the unit was broken out. The artificial horizon bar and ground-sky face were crushed inward and charred. The horizon bar adjust knob was burned away. The attitude indicator case was cut open to examine the attitude indicator gyro. The gyro case was removed and disassembled. An examination of the attitude indicator gyro case showed several scoring marks on the inside wall running in the direction of gyro rotation. The gyro showed two deep scoring marks, both approximately 1-inch long, running circumferentially within 1/16-inch of the front of the gyro on opposite sides.

The airplane's engines, serial numbers 77107 (left engine) and 77211 (right engine), were examined at Pratt and Whitney Canada Engine Services, Bridgeport, West Virginia, on May 30 and 31, 2001. The examination revealed no anomalies with either engine.

An audiotape of radio communications that took place between GRB ATCT and the pilot was sent to the NTSB Audio Laboratory, Washington, DC, to examine speech evidence to determine the pilot's level of psychological stress and workload. NTSB investigators examined all 8 radio transmissions made by the pilot and recorded by GRB ATCT. The examination, conducted on July 30, 2001, indicated that the pilot's speech characteristics were consistent with an increased stress/workload that might accompany a developing emergency. Referring to the pilot's final transmissions, the report states, "His unusually long reaction time suggests that he was distracted by competing cockpit priorities and/or was having a difficult time determining his answer, while his fast speech and microphone keying provide further evidence of an urgency to return to other cockpit activities." The report also states that the pilot's statements remained rational and showed good word choice and grammar. "These factors, along with the relatively small change in fundamental frequency, suggest that the pilot did not reach an



extreme level of stress." The NTSB Speech Examination Group Study is provided as an addendum to this report.

A mechanic at the FBO repair station said that at 0800 on the day of the accident, the pilot contacted him by phone and told the him that he wanted the fuel topped off. The pilot also said that he would arrive at the repair station at 1600 to pick up the airplane. The mechanic said the pilot arrived at the repair station some time after 1600. He said that he talked to the pilot as they walked through the hangar to the airplane. The mechanic noted the hangar door was open and it was snowing a little. The mechanic said the pilot did his walk around inspection of the airplane in the hangar. The pilot then got into the airplane. The airplane was already attached to the tug. The mechanic said the airplane was towed out of the hangar, the pilot started the engines, and left.

The receptionist at the FBO repair station said that she was behind the front desk when the pilot arrived. She estimated the time to be between 1600 and 1610. She said that the pilot went immediately to the back rooms where the vending machines and the flight planning room was. The receptionist said the pilot was only back there for a few minutes. When the pilot returned to the lobby area, he had a coke and a snack in his hands. Because his hands were full, the receptionist said she got up and opened the door to the hangar for him. The receptionist said that she commented to the pilot, "That's your dinner?" She said the pilot's response was, "No, my dinner's in Ft. Myers." The receptionist estimated that the pilot's total time in the lobby area was between 2 to 5 minutes.

A line worker for the FBO repair station said that the pilot was scheduled to arrive at 1600 to pick up the airplane, but was late. He said that he had heard from another employee that the commercial flight the pilot was on was running late that day. The line worker said that when the pilot arrived, he saw the pilot and the mechanic talk while the pilot did a walk around inspection of the airplane. The line worker said that the airplane was hooked up to the tractor and was ready to go. He said the pilot got into the airplane. The line worker said he then pulled the airplane out of the hangar with the pilot inside. The line worker said it was snowing at the time, "big, wet flakes". He said he unhooked the tow bar and left. The line worker said that from the time he pulled the airplane out of the hangar until he unhooked the tow bar was about 2 minutes. He said that it was less than 5 minutes from the time he unhooked the tow bar until the airplane was taxiing out.

#### MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy of the pilot was conducted by the Brown County, Wisconsin, Medical Examiner, at St. Vincent's Hospital, Green Bay, Wisconsin, on April 5, 2001.

FAA toxicology testing of samples taken from the pilot was negative for all tests conducted. Some tests were not conducted due to insufficient samples.

#### FIRE

At 1631, Ashwaubenon Public Safety and Brown County Emergency 9-1-1 received calls of an explosion at the Morning Glory Dairy. Fire department units from Ashwaubenon Public Safety, Austin-Straubel Airport Fire and Rescue, De Pere, Hobart, and Lawrence, Wisconsin, responded to the calls. The first units arrived at the scene at 1636. The first units responded to the south side of the building where the major area of fire was occurring. The walls on the south side of the building were down and the roof was partially collapsed. A large amount of smoke was observed coming from out of the structure, blowing from in a west-southwesterly

direction. The majority of the fire was brought under control by 1750. Ashwaubenon Public Safety fire units remained on scene to put out small spot fires that occasionally flared up within the cold storage facility into the next day.

**ADDITIONAL INFORMATION**

Parties to the investigation were the Federal Aviation Administration Flight Standards District Office, Milwaukee, Wisconsin, the Cessna Aircraft Company, Pratt and Whitney Engine Services, Canada, and the National Air Traffic Controllers Association.

All of the airplane wreckage was released and returned to ACE USA Insurance, Company, Chicago, Illinois.

Ashwaubenon Public Safety reported the estimated costs incurred from the accident included the complete loss of the Morning Glory Dairy cold storage facility at \$4,800,000.00, contents within the building to include equipment and dairy products at \$1,000,000.00, and the airplane at \$2,000,000.00.

**Pilot Information**

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	54, 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, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last Medical Exam:</b>	09/22/2000
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	04/26/2000
<b>Flight Time:</b>	4548 hours (Total, all aircraft), 245 hours (Total, this make and model), 3567 hours (Pilot In Command, all aircraft), 108 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Cessna	Registration:	N405PC
Model/Series:	501	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	501-0150
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	03/29/2001, Continuous Airworthiness	Certified Max Gross Wt.:	11850 lbs
Time Since Last Inspection:	0.2 Hours	Engines:	2 Turbo Jet
Airframe Total Time:	5856.8 Hours	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	JT15D-1
Registered Owner:	Travelers Solutions, Inc.	Rated Power:	2200 lbs
Operator:	Travelers Solutions, Inc.	Air Carrier Operating Certificate:	None
Operator Does Business As:	Leisure Time Services	Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	GRB, 695 ft msl	Observation Time:	1638 CDT
Distance from Accident Site:	2 Nautical Miles	Direction from Accident Site:	220°
Lowest Cloud Condition:		Temperature/Dew Point:	0°C / 0°C
Lowest Ceiling:	Broken / 200 ft agl	Visibility	0.5 Miles
Wind Speed/Gusts, Direction:	3 knots, 120°	Visibility (RVR):	
Altimeter Setting:	29.99 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	GREEN BAY, WI (GRB)	Type of Flight Plan Filed:	IFR
Destination:	FT. MYERS, FL (RSW)	Type of Clearance:	IFR
Departure Time:	1627 CDT	Type of Airspace:	Class C

## Airport Information

Airport:	Austin Straubel Airport (GRB)	Runway Surface Type:	Concrete
Airport Elevation:	695 ft	Runway Surface Condition:	Wet
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	8200 ft / 150 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	On-Ground
<b>Ground Injuries:</b>	3 Serious, 4 Minor	<b>Aircraft Explosion:</b>	On-Ground
<b>Total Injuries:</b>	1 Fatal, 3 Serious, 4 Minor	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	David C Bowling	<b>Adopted Date:</b>	06/03/2002
<b>Additional Participating Persons:</b>	Michael E Batson; Federal Aviation Administration; Milwaukee, WI William B Welch; Cessna Aircraft Company; Wichita, KS Patrick Eesley; Cessna Aircraft Company; Milwaukee, WI Robert Jackson; Cessna Aircraft Company; Milwaukee, WI Ray Rall; Pratt and Whitney Engine Services; Centerville, OH Michelle A Wroblewski; National Air Traffic Controllers Association; Green Bay, WI Paul F Crosby; Pratt and Whitney Canada Engine Services; Bridgeport, WV		
<b>Publish Date:</b>			
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