



National Transportation Safety Board Aviation Accident Final Report

| | | | |
|--------------------------------|---|-------------------------|-------------|
| Location: | Alliance, NE | Accident Number: | CHI07FA068 |
| Date & Time: | 02/08/2007, 0225 MST | Registration: | N1116Y |
| Aircraft: | Cessna 208B | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 Serious |
| Flight Conducted Under: | Part 135: Air Taxi & Commuter - Non-scheduled | | |

Analysis

The pilot was dispatched on a nonscheduled cargo flight to an airport other than his usual destination because it had a precision instrument approach, while his usual destination airport did not. The pilot elected to fly to his usual airport, and attempted a nonprecision instrument approach. The airport had both a VOR and an NDB approach. The NDB approach was noted as being out of service, although there was still a radio signal coming from the navigation aid. The pilot was cleared for the VOR approach, although instrumentation inside the cockpit was found set for the NDB approach, and radar track data disclosed that the flight path was consistent with the NDB approach path, not the VOR's. The airport's reported weather was 1.25 miles visibility, with a 200-foot overcast in mist. The airport's minimum NDB approach altitude is 652 feet above touchdown height. The airplane did not reach the runway, and collided with a pole and a building. Inspection of the airplane disclosed no evidence of any preimpact mechanical malfunctions.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's descent below minimum descent altitude while on a nonprecision approach. A contributing factor was a low ceiling.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: APPROACH

Findings

1. (F) WEATHER CONDITION - LOW CEILING
2. (C) MINIMUM DESCENT ALTITUDE - BELOW - PILOT IN COMMAND
3. OBJECT - BUILDING(NONRESIDENTIAL)

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. TERRAIN CONDITION - GROUND
5. OBJECT - POLE

Factual Information

HISTORY OF FLIGHT

On February 8, 2007, about 0225 mountain standard time, a Cessna 208B, N1116Y, operated by Suburban Air Freight Inc., sustained substantial damage on impact with a building and terrain during a non-precision approach to runway 12 at the Alliance Municipal Airport (AIA), near Alliance, Nebraska. The non-scheduled domestic cargo flight was operating under 14 CFR Part 135. Night instrument meteorological conditions prevailed at the time of the accident. An instrument flight rules (IFR) flight plan was on file and was activated. The commercial pilot sustained serious injuries and was hospitalized. The flight originated from Eppley Airfield (OMA), near Omaha, Nebraska, about 2345, and was dispatched to the Western Nebraska Regional Airport/William B. Heilig Field (BFF), near Scottsbluff, Nebraska.

The operator's accident report, in part, stated:

Scheduled U.S. Mail route operating AIA - LBF [North Platte, Nebraska] - OMA, OMA - AIA. Due to low IFR conditions and preceding night's aircraft diverting to, and remaining at CDR, (Chardon, Nebraska), and being unable to position into AIA for the evening departure, decision was made to leave the first [airplane] at CDR overnight, and simply fly a [second airplane] from OMA - BFF where [weather] was suitable for ILS [instrument landing system] approach. Only non-precision approaches, with higher minimums, are available at AIA. Thus, the accident [airplane] was dispatched to take mail directly to BFF, which has precision approaches (ILS), and the U.S. Mail truck was to meet the aircraft at BFF. That is a normal procedure for occasions when AIA is below non-precision landing conditions. All scheduled flights operate on "canned" flight plans which are on file. ... The flight from OMA to either BFF or AIA proceeds along the identical route until west of North Platte, Nebraska. ... The change is typically only requested after handoff from [Minneapolis] Center to [Denver] Center, west of North Platte. ... Since the direct route from OMA - BFF passes literally over, or almost over, the procedure turn for the AIA approach procedures, there is always the option for a pilot to check weather at AIA, and if it has unexpectedly improved so as to allow landing at AIA, certainly, then he may land. However, in this case, the mission was not to go to AIA, land, and remain for the next evening's return, but rather to simply

proceed to BFF, execute the precision approach, drop off the mail, and return to OMA empty immediately.

An excerpt from a Federal Aviation Administration's (FAA) Air Route Traffic Control Center (ARTCC) transcript follows:

Agencies Making Transmissions Abbreviations

Denver ARTCC, Sector 35R Radar Controller ZDV35R

Suburban Air Freight, INC. (Omaha, NE) SUB22

...

0846:46 ZDV35R sub air two two denver center

0846:52 SUB22 denver center sub air two two level eight thousand

0846:55 ZDV35R sub air two two denver center roger the uh alliance
altimeter is three zero one seven and do you have the uh
alliance weather yet

0847:10 SUB22 three zero one seven sub air two two uh we are
requesting the uh v o r runway one two

0847:18 ZDV35R sub air two two roger

0848:09 ZDV35R sub air two two do you have the uh weather and notam
information for alliance

0849:17 SUB22 sub air two two i have the uh alliance awos and notams

0849:22 ZDV35R sub air two two roger

0854:15 SUB22 denver center sub two two request

0854:17 ZDV35R sub air two two go ahead

0854:20 SUB22 roger sub air two two would like to uh uh amend my uh
request for the uh v o r runway three zero at alliance
and uh in the event uh i have to go missed approach i'll
be uh planning to uh head over to scottsbluff

0854:36 ZDV35R sub air two two roger maintain seven thousand until
alliance v o r outbound cleared for v o r runway three
zero approach to the alliance airport

0854:48 SUB22 sub air two two departing eight for seven thousand
maintaining seven thousand until established cleared v o r
runway three zero alliance thank you

0857:11 SUB22 sub air two two copies all switching to advisory and i'll close out my flight plan with columbus radio or i'll contact you later if i have to uh divert to Scottsbluff

0857:21 ZDV35R sub air two two roger

0857:57 ZDV35R sub air two two radar service terminated change to advisory frequency approved report your uh arrival with columbus radio or you can report back to me if you uh have to go missed approach there

0908:41 SUB22 denver center sub air two two request

0908:52 ZDV35R alpine or correction uh sub air two two go ahead

0908:56 SUB22 (unintelligible) sir sub air two two looks like i'm gonna have to uh flr the v o r runway one two after all request uh v o r runway one two at alliance

0909:08 ZDV35R sub air two two roger uh cleared for v o r runway one two approach to the alliance airport maintain seven thousand until established on a published segment of the approach

0909:20 SUB22 sub air two two maintaining seven thousand until established cleared v o r runway one to alliance thank you sir- - - and uh switching back to advisory

0909:29 ZDV35R sub air two two roger change to advisory frequency approved

0909:34 SUB22 sub air two two

A witness, who was a train engineer in a standing locomotive about a quarter mile from the impact site, reported that he felt a shock wave against his locomotive and thought it was impacted by something. He went out to inspect the locomotive. The train had collected a coating of ice and the weather was foggy according to the engineer. He stated that he saw a leaning power pole across the roadway and saw steam rising from the ditch across the roadway. He went to investigate, saw the airplane, and called 911.

FAA inspectors interviewed the pilot and he reported that he did not recall the accident.

PERSONNEL INFORMATION

According to FAA records, the pilot was issued a commercial pilot certificate with an airplane multiengine land limited to center thrust and instrument airplane ratings on October 25, 1977, based on military competence provisions allowed under 14 CFR Part 61.73 Military Pilots or

Former Military Pilots: Special Rules. On December 14, 1977, he added an airplane single-engine land rating to his commercial certificate following a check ride in a Cessna 172. On August 25, 1978, he was reissued his commercial certificate without the center thrust limitation based on his military competence in the KC-135A airplane. On June 22, 1982, he was issued a type rating in the Boeing 707 and 720 airplanes based on his military competence in the KC-135A airplane. On August 22, 1982, he was issued an airplane single-engine certified flight instructor certificate following a check ride in a Piper PA-28R-200. On June 19, 1989, he was issued a type rating in the McDonnell Douglas DC-10 based on his military competence in a KC-10A airplane.

The pilot's last medical examination was completed on July 10, 2006, and the pilot was issued a second-class medical certificate with a limitation to wear corrective lenses.

According to the operator's report, the pilot reported a total flight time of 4,863 hours. The operator reported that the pilot had flown 523 hours in the Cessna 208. The operator reported that the pilot had flown 203 hours during the last 90 days and 64 hours during the last 30 days.

On October 2, 2006, the pilot attended and completed the airplane manufacturer's winter operations training seminar. The pilot attended recurrent ground training for the Cessna 208 aircraft on January 17, 2007. The pilot's last FAA Airman Competency/Proficiency Check was completed on January 18, 2007, and he was approved for 14 CFR Part 135 pilot-in-command operations in the Cessna 208.

AIRCRAFT INFORMATION

N1116Y, a Cessna 208B, Caravan, serial number 208B0368, was a single-engine, turbo-prop, high-wing airplane, equipped with fixed tricycle landing gear. The fuselage and empennage are of an all-metal semimonocoque design. The wings are externally braced and have two integral fuel tanks. The accident airplane was configured for flight into known icing conditions and to carry cargo. The airplane was equipped with two cockpit seats. The Cessna 208B had its certified maximum takeoff weight increased by supplemental type certificate SA00188SE to 8,950 lbs. A 675-horsepower Pratt & Whitney Canada PT6A-114A, serial number PCE-19241, powered the airplane. The propeller was an electrically heated three-bladed McCauley 3GFR34C703-B model with hub serial number 952444.

The airplane was equipped with distance measuring equipment (DME) and was not equipped with global positioning system (GPS) navigation equipment.

A Radio Magnetic Indicator (RMI) was installed. The RMI display combined three navigation data points on one indicator. The data points were the current aircraft heading and the magnetic headings to VHF Omnidirectional Range (VOR) and Non-Directional Beacon (NDB) stations, which were shown by the RMI's twin needles. Either needle could be switched to show VOR or NDB data in reference to the frequency that the pilot had selected in the navigation/communication radio or NDB receiver.

The airplane was equipped with a panel mounted KI 525A Horizontal Situation Indicator (HSI) which showed standard Directional Gyro and Course Deviation Indicator (CDI) information, slaved heading, and VOR, Localizer, and Glideslope information in one display. The HSI indicator incorporated a Course Select Knob that rotated the course pointer to the desired

course on the compass card. This knob corresponded to an Omni Bearing Selector (OBS) on standard VOR indicators. The HSI had a Heading Select Bug, which was a movable orange marker on the outer perimeter of the compass display, used primarily to select the desired heading you wished to fly. This desired heading can be coupled to the autopilot system.

The airplane was being maintained under an approved aircraft inspection program for the Cessna 208B. Phase nine of the program was completed on January 11, 2007. The airplane had accumulated 7,248.3 hours of total flight time and its Hobbs meter read 6,188.7 hours.

The airplane was modified with a Cessna Service Bulletin (SB) titled, "FLIGHT INTO KNOWN ICING - LOW AIRSPEED AWARENESS SYSTEM INSTALLATION." The propeller anti-ice switch activated the awareness system. The SB, in part, stated:

The new low speed awareness system is designed to alert the pilot with the illumination of an annunciator light on the instrument panel and the sound of an aural horn when the airspeed is less than approximately 110 [knots indicated airspeed]. ... Compliance with this Service Bulletin will assist the pilot in taking appropriate actions during icing operations.

The dispatch record for the flight showed the airplane was carrying 2,126 pounds of cargo during the flight. The cargo was rechecked after the accident and its rechecked weight was 2,206 pounds.

METEOROLOGICAL INFORMATION

A Senior Meteorologist for the National Transportation Safety Board (NTSB) compiled a Meteorological Factual Report for the investigation. The report listed pilot reports (PIREP) near the airplane's route of flight. The PIREPs showed that airplanes were reporting light to moderate icing conditions. Airmen's meteorological information (AIRMET) advisories were issued for IFR conditions. The AIRMET was valid from 1945 on February 7, 2007, through the time of the accident.

At 0153, the recorded weather at AIA was: Wind 050 degrees at 4 knots; visibility 1 1/4 statute miles; present weather mist; sky condition overcast 200 feet; temperature -6 degrees Celsius (C); dew point -7 degrees C; altimeter 30.17 inches of mercury.

At 0219, the recorded weather at AIA was: Wind 070 degrees at 4 knots; visibility 1 statute mile; present weather mist; sky condition overcast 200 feet; temperature -6 degrees C; dew point -7 degrees C; altimeter 30.17 inches of mercury

AIDS TO NAVIGATION

There were five non-precision instrument approaches and no precision approaches available at AIA. The non-precision approaches were the area navigation (RNAV) GPS RWY 12 approach, the RNAV GPS RWY 30 approach, the VOR RWY 12 approach, the VOR RWY 30 approach, and the (NDB) RWY 12 approach.

The pilot was cleared for the VOR RWY 12 approach. The published inbound course was 111 degrees magnetic and the straight in minimum descent altitude for that approach was 4,560 feet above mean sea level (MSL), which was listed as 632 feet above the touchdown. The straight in minimum descent altitude, for DME equipped aircraft, once past the AIA 2.3 DME fix was 4,380 feet MSL, which was listed as 452 feet above the touchdown. The touchdown zone elevation for runway 12 was 3,928 feet MSL. The published weather minimums for the approach were a 700-foot ceiling and one-mile visibility for category A and B aircraft. The published weather minimums for the approach were a 500-foot ceiling and one-mile visibility for category A and B aircraft equipped with DME.

The straight-in minimum descent altitude for the NDB RWY 12 approach was 4,580 feet MSL, which was listed as 652 feet above the touchdown. The published inbound course was 127 degrees magnetic. The published weather minimums for the approach were a 700-foot ceiling and one-mile visibility for category A and B aircraft.

A NOTAM had been issued on February 1, 2007, stating that the AIA's NDB was out of service. Pilots reported that the signal associated with AIA's NDB frequency was still being transmitted while the out of service NOTAM was in effect.

AIRPORT INFORMATION

AIA was located about three miles southeast of the city at an elevation of 3,931 feet MSL. It was served by three runways 8-26, 17-35, and 12-30. Runway 12-30 was 9,202 feet long and 150 feet wide. The runway was made of asphalt. Medium intensity runway lighting for runway 12-30 and 8-26 was pilot-controlled. Pilot-controlled runway end identifier lights and a visual approach slope indicator serviced runway 12.

WRECKAGE AND IMPACT INFORMATION

The airplane was found resting upright impacting a power pole near the intersection of West 25th Street and Highway 385. The airplane fuselage had split open on its left side aft of the flaps. The right wing remained attached to the fuselage. The empennage remained attached to the fuselage. The inboard section of the left wing remained attached to the fuselage.

A metal building northwest of the airplane was found with tears in its roof and side. The tears in the roof were in line with a ground scar that started about 60 feet southeast of the torn wall section. The ground scar continued on about a 105-degree magnetic heading and stopped at the airplane wreckage. The airplane wreckage was about 230 feet from the torn wall section. The outboard section of the left wing was found near the ground scar. A flap rail from the left wing was found in the building and the left navigation light cover was found on the roof by the first tear in the roof. Red media was observed on the roof by the navigation light cover. The propeller hub separated from the engine. Two propeller blades separated from the hub and were found resting near the ground scar. The third propeller blade separated from the hub and was found in a field about 150 yards south of the start of the ground scar and was about 200 yards southwest of the main wreckage. The left fuel tank was compromised. The smell of jet fuel was present around the left wing. The right wing fuel tank contained liquid consistent with jet fuel. The fuel line to the engine contained liquid consistent with jet fuel. The emergency

locator transmitter was found activated. The Hobbs meter indicated 6,240 hours. The DME selector switch was positioned to the number one navigation radio. The Heading Select Bug was pointing to a desired course of 120 degrees. The Course Select Knob was selecting a course of about 106 degrees. Both of the RMI's indicator switches were set to NDB.

Ice was found on the leading edge boots of the wings, elevators, and rudder. Ice was found on the propeller anti-icing boots. The ice accumulation was consistent with rime ice and the ice varied in thickness from 1/10 inch to 1/8 inch. Ice was found on unprotected surfaces of the aircraft. The maximum amount of ice that was found on the airplane was on the right strobe light. The light had about 3/8 inch of ice on its leading surface. The switch for the propeller anti-ice was found in the off position.

An on-scene investigation was conducted. Flight control cables were traced from the cockpit to their respective surfaces. All breaks in the cables were consistent with overload. Engine control cables were traced from the cockpit to the engine and engine control continuity was established. The airframe exhibited no pre-impact anomalies.

MEDICAL AND PATHOLOGICAL INFORMATION

The FAA Civil Aerospace Medical Institute (CAMI) prepared a Final Forensic Non-Fatal Toxicology Accident Report. The report stated:

MIDAZOLAM detected in Urine

MIDAZOLAM NOT detected in Serum

The NTSB's Medical Officer extracted the following medical information from post-accident emergency room records maintained on the pilot by the general hospital at which he was initially treated:

2/8/07 - "Trauma Nurse's Notes" indicate, in part, "...

0315 Versed [midazolam] 2 mg intravenous push ...

0338 3mg Versed intravenous push ..."

The following medical information was provided to the NTSB's Medical Officer, by staff of the CAMI Forensic Toxicology Research Team:

The serum tested on this pilot was noted to have been drawn at 0305 on 2/08/07.

The urine tested on this pilot was noted to have been collected at 0626 on 2/08/07.

TESTS AND RESEARCH

The FAA supplied recorded National Track Analysis Program (NTAP) radar data for the flight. That NTAP data was plotted on approach procedure charts for the VOR RWY 12 approach and the NDB RWY 12 approach. The flight's track did not align with the VOR approach. The track was consistent with the NDB approach.

On March 6, 2007, the engine was examined at a storage facility in Greeley, Colorado. The engine's pneumatic lines were intact. Visual inspection of the compressor and combustion sections revealed no pre-impact anomalies. The compressor turbine exhibited a circular

witness mark consistent with contact with the power turbine's baffle. The power turbine and its shroud exhibited witness marks consistent with turbine blade rubbing. The reduction gearbox's first and second stage planetary gear coupler was fractured. That fracture surface was smeared. Liquid consistent with jet fuel was found in the fuel lines to the fuel nozzles and liquid exited the fuel pump when the pump was rotated by hand. No engine pre-impact anomalies were detected that would have prevented engine operation.

The avionics were examined at a Honeywell facility in Olathe, Kansas, on April 17, 2007. The avionics exam revealed that the number one navigation/communication radio was intermittent during testing. The number one navigation/communication radio was selecting the VOR frequency for AIA. The number two navigation/communication radio was operational during testing. The number two navigation/communication radio was selecting the VOR frequency for AIA. The autopilot sustained damage, passed its built in test function after power was applied, functioned during testing, and no pre-impact anomalies were detected with the autopilot. The ADF was operational when power was applied and was selecting the same frequency as AIA's NDB. The transponder exhibited a 1200 code when power was applied.

The airplane's de-ice valves were examined under FAA supervision at a BF Goodrich facility in Uniontown, Ohio, on April 3, 2007. The valves were operational during testing.

The standby alternator was examined at a Kelly Aerospace facility in Wichita, Kansas, on April 19, 2007. The alternator was operational during testing.

The starter/generator was examined under FAA supervision at a Unison facility in Holtsville, New York, on April 20, 2007. The starter/generator sustained connector block damage. The connector block was replaced and the generator was operational during testing.

ADDITIONAL DATA/INFORMATION

Excerpts from 14 CFR Part 61.73 Military pilots or former military pilots: Special rules, in part, stated

(a) General. Except for a rated military pilot or former rated military pilot who has been removed from flying status for lack of proficiency, or because of disciplinary action involving aircraft operations, a rated military pilot or former rated military pilot who meets the applicable requirements of this section may apply, on the basis of his or her military training, for:

- (1) A commercial pilot certificate;
- (2) An aircraft rating in the category and class of aircraft for which that military pilot is qualified;
- (3) An instrument rating with the appropriate aircraft rating for which that military pilot is qualified; or
- (4) A type rating, if appropriate.

(b) Military pilots on active flying status within the past 12 months. A rated military pilot or former rated military pilot who has been on active flying status within the 12 months before applying must:

- (1) Pass a knowledge test on the appropriate parts of this chapter that apply to pilot privileges and limitations, air traffic and general operating rules, and accident reporting rules;
- (2) Present documentation showing compliance with the requirements of paragraph (d) of this section for at least one aircraft category rating; and
- (3) Present documentation showing that the applicant is or was, at any time during the 12 calendar months before the month of application--
 - (i) A rated military pilot on active flying status in an armed force of the United States; or

...

(d) Aircraft category, class, and type ratings. A rated military pilot or former rated military pilot who applies for an aircraft category, class, or type rating, if applicable, is issued that rating at the commercial pilot certificate level if the pilot presents documentary evidence that shows satisfactory accomplishment of:

- (1) An official U.S. military pilot check and instrument proficiency check in that aircraft category, class, or type, if applicable, as pilot in command during the 12 calendar months before the month of application;
- (2) At least 10 hours of pilot-in-command time in that aircraft category, class, or type, if applicable, during the 12 calendar months before the month of application; or
- (3) An FAA practical test in that aircraft after--
 - (i) Meeting the requirements of paragraphs (b)(1) and (b)(2) of this section; and
 - (ii) Having received an endorsement from an authorized instructor who certifies that the pilot is proficient to take the required practical test, and that endorsement is made within the 60-day period preceding the date of the practical test.

(e) Instrument rating. A rated military pilot or former rated military pilot who applies for an airplane instrument rating, a helicopter

instrument rating, or a powered-lift instrument rating to be added to his or her commercial pilot certificate may apply for an instrument rating if the pilot has, within the 12 calendar months preceding the month of application:

(1) Passed an instrument proficiency check by a U.S. Armed Force in the aircraft category for the instrument rating sought; and

(2) Received authorization from a U.S. Armed Force to conduct IFR flights on Federal airways in that aircraft category and class for the instrument rating sought.

(f) Aircraft type rating. An aircraft type rating is issued only for aircraft types that the Administrator has certificated for civil operations.

...

(h) Evidentiary documents. The following documents are satisfactory evidence for the purposes indicated:

(1) An official identification card issued to the pilot by an armed force may be used to demonstrate membership in the armed forces.

(2) An original or a copy of a certificate of discharge or release may be used to demonstrate discharge or release from an armed force or former membership in an armed force.

(3) Current or previous status as a rated military pilot with a U.S. Armed Force may be demonstrated by--

(i) An official U.S. Armed Force order to flight status as a military pilot;

(ii) An official U.S. Armed Force form or logbook showing military pilot status; or

(iii) An official order showing that the rated military pilot graduated from a U.S. military pilot school and received a rating as a military pilot.

(4) A certified U.S. Armed Force logbook or an appropriate official U.S. Armed Force form or summary may be used to demonstrate flight time in military aircraft as a member of a U.S. Armed Force.

(5) An official U.S. Armed Force record of a military checkout as pilot in command may be used to demonstrate pilot in command status.

(6) A current instrument grade slip that is issued by a U.S. Armed Force, or an official record of satisfactory accomplishment of an instrument

proficiency check during the 12 calendar months preceding the month of the application may be used to demonstrate instrument pilot qualification.

FAA records showed that the accident pilot was involved in an incident on August 30, 1984, at Lowell, Michigan. He passed a reexamination with an inspector from the Fresno, California, Flight Standards District office on December 10, 1984.

The accident pilot was involved in a mishap as an Air Force pilot on September 2, 1997, at Pope AFB, North Carolina. He was the aircraft commander of an EC-135C, serial number 63-8053, which sustained nose landing gear damage and post impact hydraulic fire damage during landing.

On March 31, 2004, he was involved in an accident at Omaha, Nebraska. The NTSB's report stated that "Swearingen SA226-T, N636SP, sustained substantial damage during takeoff when the airplane veered off the right side of runway 30 (3,801 feet by 75 feet, concrete) at the Millard Airport." On June 14, 2004, he passed a reexamination with an inspector from the Lincoln, Nebraska, Flight Standards District Office.

A witness who had flown with the accident pilot, in part, stated:

On active duty, assigned to the 55th Wing at Offutt AFB [pilot's name] had some difficulty completing the EC-135 checkout program. I was asked to observe his performance in both the simulator and the aircraft. My professional assessment as the instructor given to both the Operations Officer and the Commander was not to certify, then LtCol [pilot's name] to command an EC-135. I recommended this based on his lack of confidence during air refueling as a receiver, and his indecisiveness during critical phases of flight while being task saturated. If everything was "as scripted", as planned he was competent. However, when there were issues such as weather, mechanical problems or schedule deviations he focused on the point and lost track of the overall objectives. Tunnel Vision. After we both retired, he was flying a Merlin IIIB for a private company and had some operational questions. Because I was experienced in that type aircraft he asked for my advice. I noted that we had the same instructor at Flight Safety and that the training was adequate, but that the instructor had no operational experience in our aircraft type. I made a point of talking to him about the things I had learned after flying a Merlin for several years. He listened, but continued to operate the aircraft as he was before our flights. In my opinion some of the precise issues we talked about as strong techniques and more

clearly defined procedures were causal to his accident with the Merlin at Millard later that year. It is my professional opinion after flying with and observing [pilot's name] that he was not a "stick and rudder" pilot. He is extremely intelligent and after studying technical data knew the tech data perfectly, but did not apply his knowledge in a timely, accurate manner consistently. In a crunch, or when overwhelmed he had a tendency to lose overall situational awareness, and lacked the ability to multi-task. These are not good traits for a single pilot operation.

FAA regulations in-place at the time of the accident and current regulations, to include 14 CFR Part 61.73 Military pilots or former military pilots: Special rules, do not require FAA personnel to review the pilot's incident and accident record from military service prior to the issuance or after the issuance of a FAA pilot certificate based on military competency.

The operator's safety recommendation, in part, stated:

Subsequent information provided by retired military pilot(s) suggest there may have been awareness in the military flying environment of decision making issues, but no records, evaluations, or indications of any kind are available to civilian aviation entities considering the hiring of ex-military pilots. Such information as might be available from civilian flying activities, if released by or provided by military sources might be of immense assistance. A recommendation might be considered whereby such materials and information might be shared or made available.

The parties to the investigation included the FAA, Cessna Aircraft Company, Suburban Air Freight Inc., Pratt & Whitney Canada, and Honeywell.

The aircraft wreckage and retained items were released to a representative of the insurance company.

Pilot Information

| | | | |
|----------------------------------|--|--|----------------------------|
| Certificate: | Commercial | Age: | 52, 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): | Airplane Single-engine | Toxicology Performed: | Yes |
| Medical Certification: | Class 2 With Waivers/Limitations | Last Medical Exam: | 07/01/2006 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | 01/01/2007 |
| Flight Time: | 4863 hours (Total, all aircraft), 523 hours (Total, this make and model), 3853 hours (Pilot In Command, all aircraft), 1 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| | | | |
|--------------------------------------|--|---|--------------------------|
| Aircraft Manufacturer: | Cessna | Registration: | N1116Y |
| Model/Series: | 208B | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal | Serial Number: | 208B0368 |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | 01/01/2007, AAIP | Certified Max Gross Wt.: | 8750 lbs |
| Time Since Last Inspection: | 51.3 Hours | Engines: | 1 Turbo Prop |
| Airframe Total Time: | 7299.6 Hours | Engine Manufacturer: | Pratt & Whitney Canada |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | PT6A-114A |
| Registered Owner: | SUBURBAN AIR FREIGHT INC | Rated Power: | 675 hp |
| Operator: | SUBURBAN AIR FREIGHT INC | Air Carrier Operating Certificate: | On-demand Air Taxi (135) |
| Operator Does Business As: | | Operator Designator Code: | JDWA |

Meteorological Information and Flight Plan

| | | | |
|----------------------------------|-----------------------|-------------------------------|---------------|
| Conditions at Accident Site: | Instrument Conditions | Condition of Light: | Night |
| Observation Facility, Elevation: | AIA, 3931 ft msl | Observation Time: | 0153 MST |
| Distance from Accident Site: | 6 Nautical Miles | Direction from Accident Site: | 120° |
| Lowest Cloud Condition: | | Temperature/Dew Point: | -6 °C / -7 °C |
| Lowest Ceiling: | Overcast / 200 ft agl | Visibility | 1.25 Miles |
| Wind Speed/Gusts, Direction: | 4 knots, 50° | Visibility (RVR): | |
| Altimeter Setting: | 30.17 inches Hg | Visibility (RVV): | |
| Precipitation and Obscuration: | Mist | | |
| Departure Point: | OMAHA, NE (OMA) | Type of Flight Plan Filed: | IFR |
| Destination: | Alliance, NE (AIA) | Type of Clearance: | IFR |
| Departure Time: | 2345 MST | Type of Airspace: | |

Airport Information

| | | | |
|----------------------|---------------------|---------------------------|-----------|
| Airport: | ALLIANCE MUNI (AIA) | Runway Surface Type: | Asphalt |
| Airport Elevation: | 3931 ft | Runway Surface Condition: | Unknown |
| Runway Used: | 12 | IFR Approach: | VOR/DME |
| Runway Length/Width: | 9202 ft / 150 ft | VFR Approach/Landing: | Full Stop |

Wreckage and Impact Information

| | | | |
|---------------------|-----------|----------------------|------------------------|
| Crew Injuries: | 1 Serious | Aircraft Damage: | Substantial |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Serious | Latitude, Longitude: | 42.055000, -102.806389 |

Administrative Information

| | | | |
|-----------------------------------|--|---------------|------------|
| Investigator In Charge (IIC): | Edward F Malinowski | Adopted Date: | 04/30/2008 |
| Additional Participating Persons: | James Sazama; Federal Aviation Administration; Lincoln, NE Michael L Koonce; Cessna Aircraft Company; Wichita, KS Marc Gratton; Pratt & Whitney Canada; Longueuil, QC Canada, William Gill; Honeywell; Olathe, KS Jeffrey Gallup; Suburban Air Freight Inc.; Omaha, NE | | |
| Publish Date: | | | |
| Investigation Docket: | NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ . | | |

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.

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