



National Transportation Safety Board Aviation Accident Final Report

Location:	Parks, AZ	Accident Number:	DEN03FA012
Date & Time:	11/08/2002, 1020 MST	Registration:	N514DB
Aircraft:	Cessna 208B	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	4 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane departed Las Vegas, Nevada, approximately 0919, on an IFR flight plan to Midland, Texas. The pilot climbed to an initial cruising altitude of 13,000 feet. At 1005, the pilot contacted Albuquerque ARTCC (ZAB) and reported that he was level at 13,000 feet. At 1009, the pilot requested to climb to 15,000 and the ZAB controller approved the request. At 1013:55, the pilot contacted Albuquerque Flight Watch and reported that he was approximately 23 miles west of Flagstaff, Arizona at 15,000 feet, and that about 20 miles west of his position, at 13,000 feet, he encountered "light mixed icing." The pilot requested any PIREP's. Flight Watch reported that a PIREP for "a trace of rime icing at 12,000," was reported by an airplane climbing westbound out of Albuquerque. The pilot acknowledged and asked for the weather across New Mexico. Flight Watch advised the pilot to stand by while he gathered the reports. At 1015:15, the pilot contacted ZAB. He reported, "getting...mixed...right...now," and requested to climb to 17,000 feet. At 1015:57 the controller cleared the airplane to 17,000 feet. At 1016:35, the FW specialist repeated the report of trace icing near Albuquerque. The pilot did not reply. ZAB radar indicated the airplane climbed to 15,200 feet then entered a rapid descent. At 1017:08, a broken transmission was received. No further communications were received from the airplane. Radar contact was lost with the airplane at 1017:20. An examination of the airplane wreckage showed no anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper in flight planning/decision making, his flight into known icing conditions, and his failure to maintain adequate airspeed which resulted in the inadvertent stall/spin and impact with terrain. Factors contributing to the accident were the pilot's improper pre-flight planning/preparation, the icing conditions, and the inadvertent stall/spin.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: CRUISE

Findings

1. (C) FLIGHT INTO ADVERSE WEATHER - INTENTIONAL - PILOT IN COMMAND
 2. (C) PREFLIGHT PLANNING/PREPARATION - IMPROPER - PILOT IN COMMAND
 3. (F) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
 4. (F) WEATHER CONDITION - ICING CONDITIONS
-

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CRUISE

Findings

5. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
 6. (F) STALL/SPIN - INADVERTENT - PILOT IN COMMAND
-

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

7. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On November 8, 2002, at approximately 1020 mountain standard time, a Cessna 208B, N514DB, operated by Brown County Financial Services, LLC, of Snyder, Texas, was destroyed when it departed controlled flight and impacted terrain approximately 3 miles south of Parks, Arizona. The commercial pilot, a private pilot-rated passenger, and two other passengers were fatally injured. Instrument meteorological conditions prevailed. The personal cross-country flight was being conducted on an instrument flight rules flight plan from Las Vegas, Nevada, to Midland, Texas, under the provisions of Title 14 CFR Part 91. The flight originated at 0819 Pacific standard time.

At 0844, the pilot contacted the Fort Worth, Texas, Automated Flight Service Station (FTW FSS) to file an instrument flight rules flight plan. The pilot told the briefer that he planned to depart Las Vegas at 0900 and cruise at 12,000 feet. The route of flight was planned to proceed via Peach Springs, Flagstaff, and Winslow, Arizona; Zuni, Albuquerque, Corona, and Roswell/Chisum, New Mexico, and end at Midland, Texas. The pilot told the briefer he planned for 4 hours en route, with 6 hours of fuel on board. The pilot provided contact information and told the briefer there were four persons aboard.

As the briefer was entering the flight plan, he asked the pilot if he got his weather. The pilot replied, "just a second ago." The pilot then asked about an airman's meteorological advisory (AIRMET) for icing. The briefer told the pilot an AIRMET was in effect for the pilot's route of flight, that included moderate mixed and rime icing from the freezing level up to 24,000 feet. The briefer added that the freezing level was forecast to be at 12,500 feet in Arizona and that it was dropping down to 10,500 feet further east. The briefer also gave the pilot advisories for scattered rain cells in New Mexico. The briefer advised the pilot of a significant meteorological advisory (SIGMET) for severe turbulence north of the his planned route, but cautioned that he may experience some turbulence as well. The pilot stated he was expecting it.

According to the Federal Aviation Administration (FAA), the airplane departed Las Vegas, Nevada, at approximately 0919. The pilot received routine clearances, via his planned route, and climbed to a cruising altitude of 13,000 feet. At 1005, the pilot contacted ZAB and reported that he was level at 13,000 feet. At 1009, the pilot requested a climb to 15,000 feet. The ZAB controller approved the request.

At 1013:55, the pilot contacted the Albuquerque Automated Flight Service Station (ABQ FSS). The pilot reported to the Flight Watch (FW) specialist that he was approximately 23 miles west of Flagstaff at 15,000 feet, and that about 20 miles west of his position, at 13,000 feet, he encountered light mixed icing. The pilot requested any pilot reports (PIREP) from the FW specialist. FW reported that the only PIREP for icing that he had was from an airplane climbing out of Albuquerque (ABQ) westbound, who reported a trace of rime icing at 12,000. The pilot acknowledged and asked about the weather across New Mexico. FW advised the pilot to stand by while he gathered the reports.

At 1015:15, the pilot called ZAB and reported "getting...mixed...right...now, ."The pilot requested to climb to 17,000 feet. The transmission was partially blocked by other aircraft. At 1015:45, the pilot repeated the altitude request. At 1015:57, the controller cleared the airplane to 17,000 feet. The pilot acknowledged.

During the conversation between the pilot and ZAB, the FW specialist transmitted the weather reports for northern New Mexico and western Texas, advising that light rain was reported at Gallup, New Mexico, layered clouds near Roswell, New Mexico, and good VFR weather near Midland, Texas. At 1016:35, the FW specialist repeated the report of trace icing near ABQ and concluded the report with "mostly just aircraft getting light chop, over." The pilot did not reply.

At the same time ABQ FSS was sending the weather reports, ARTCC radar showed the airplane climb to 15,200 feet, then rapidly descend.

At 1017:00, the FW specialist advised the pilot to "check back when you get a chance, Flagstaff altimeter 30.11." At 1017:08, ABQ FSS received a broken transmission, "four delta bravo." The FW specialist said, "you[r transmission] broke up." There were no further transmissions from the airplane. Radar contact with the airplane was lost at 1017:20.

At 1019, the ZAB controller attempted contact N514DB with no results. The controller then requested another aircraft to monitor for an emergency locator transmitter (ELT) signal. No signal was identified.

A retired airline pilot who was near the accident site, said he heard engine noises that sounded similar to an airplane doing "aerobatics." Shortly thereafter, he saw the airplane emerge from the clouds pointed straight down and in a spin. The airplane disappeared behind trees. The witness said he heard it impact the ground.

A second witness, who was flying an air ambulance Cessna 208 in the vicinity, said he heard N514DB ask Albuquerque Air Route Traffic Control Center (ZAB) for clearance to 17,000 feet because he was "getting mixed ice." The witness stated that the person making the radio call from N514DB sounded "stressed," and that the transmissions were "garbled."

A third witness, a mechanic on the air ambulance Cessna 208, stated that he heard N514DB report that they were "getting ice." The witness said that the "pilot sounded scared." The witness also said that his pilot told him "the Cessna 208 is very susceptible to icing."

The airplane wreckage was located at approximately 1030.

PERSONNEL INFORMATION

According to FAA records, the pilot held a commercial pilot certificate with airplane single-engine land, and multiengine land ratings, dated August 28, 2000. The pilot also held a flight instructor certificate with an airplane single-engine land rating, dated July 23, 2000.

The pilot held a first class airman medical certificate, dated January 7, 2002, with the limitation: "Holder must wear lenses that correct for distant vision."

According to the pilot's flight logbook, as of October 10, 2002, he had logged a total flight time of 1,880.2 hours in all aircraft, 1,187.1 hours as pilot-in-command, 428.7 hours as a flight instructor, 125.0 hours of actual instrument (3.0 hours in the last 30 days), and 76.9 hours in make and model (6.9 hours in the last 30 days). From June 24, 2002, to June 28, 2002, the pilot attended Flight Safety International, for Cessna 208 training. The pilot received 7.5 hours of simulator time, which included a 1.5 hour flight review on June 28, 2002. The last logbook entry, dated October 10, 2002, was a local flight lasting 3.7 hours. As of that date, the pilot had accumulated 87.0, 73.5, and 6.9 hours in the last 90, 60, and 30 days, respectively. An accurate account of flight time from October 10, 2002, to the date of the accident, was not determined.

According to FAA records, the pilot-rated passenger held a private pilot certificate with an airplane single-engine land rating, dated November 22, 1987. He also held a third class airman medical certificate, dated April 8, 2002, with the limitation: "Holder shall wear corrective lenses."

According to pilot records, from June 24, 2002, to June 28, 2002, the pilot rated passenger attended Flight Safety International, for Cessna 208 training. He received 7.5 hours of simulator time. As of July 31, 2002, the pilot-rated passenger had accumulated a total flight time of 650.0 hours in all aircraft.

AIRCRAFT INFORMATION

The accident airplane was a Cessna model 208B Caravan (S/N 208B0971). The airplane was manufactured in July 2002 and delivered to the owner on August 1, 2002. The airplane was used for business and pleasure. The airplane was equipped with a Pratt & Whitney Canada, Inc., model PT6A-114A free turbine engine, (S/N PCE-PC0984), rated at 675 horsepower. The engine was equipped with a McCauley three-bladed propeller (S/N 020389), with blade serial numbers WB30005, WB30007, and WB30022. According to the manufacturer, the airplane accumulated 2.2 hours of flight time prior to delivery.

A custom interior was installed in the airplane on August 16, 2002. The airplane's calculated empty weight at that time was 5,531.00 pounds. Total airplane time was not determined. However, the pilot's logbook showed he had logged 76.9 hours in the airplane.

METEOROLOGICAL INFORMATION

At 0956, the reported weather conditions at Flagstaff Pulliam Airport, Flagstaff, Arizona (located approximately 16 nautical miles at 110 degrees from the accident site) were: wind, 230 degrees at 22 knots, gusting to 27 knots; visibility 10 statute miles; sky condition, broken at 3,300 feet, overcast at 4,400 feet; temperature 43 degrees Fahrenheit (F), dew point 27 degrees F, and an altimeter setting, of 30.11.

At 1056, the reported weather conditions were: winds 230 degrees at 21 knots, gusting to 27 knots; visibility 10 statute miles; sky condition scattered at 4,100 feet; temperature 43 degrees F; dew point 27 degrees F; and an altimeter setting of 30.10.

Pilots flying aircraft in the vicinity of Grand Canyon, Flagstaff, and Prescott, Arizona, reported broken and overcast skies with light rime to moderate rime icing between 7,500 feet and 17,000.

According to the National Weather Service, in-flight weather advisories for occasional moderate icing and occasional moderate turbulence were in effect for the accident area.

WRECKAGE AND IMPACT INFORMATION

The National Transportation Safety Board on-scene investigation began on November 9, 2002, at 0805. The accident site was located in a wooded area immediately west of the north-south running asphalt covered forest service road (FS road 141), approximately 3 nautical miles south of Parks, Arizona. The accident site was on state forest land and the main impact point was

located at a latitude and longitude of 35 degrees 13.511 minutes north, and 111 degrees 55.920 minutes west. An odor of aviation fuel was present at the impact point and proceeded approximately 160 feet along a 068-degree magnetic heading, across the road, and into a wooded area on the east side of the road. The impact point was located within a stand of three Ponderosa pine trees approximately 130 feet west of the asphalt road. The three pine trees formed a line, primarily northwest to southeast. There were no signs of a post-impact fire.

The southeastern-most tree, located 22 feet from the center tree, had a gash on its trunk approximately 14 feet up from the base. There was a 10-inch wide gash on the west side of the standing trunk, beginning approximately 18 inches below the fracture and extending downward approximately 3 feet in length. The top section of the tree was located approximately 5 feet east of the tree's base. The center tree showed numerous fractured branches. Many broken tree branches were located at its base. The south side of the center tree's trunk showed numerous gashes beginning approximately 14 feet up from its base and running downward to the ground. The northwestern-most tree in the stand was located approximately 14 feet from the center tree. It was broken approximately 10 feet up from its base. A 4-foot section of the tree's trunk and bark on the tree's east side was broken downward. Numerous broken tree branches were found in the vicinity of the tree. Several pieces of chopped tree branches were also located in the area between the tree and the center tree in the stand.

An impact crater was located at the base of the center tree. The impact crater was approximately 37 inches long, 18 inches wide, and 24 inches at its deepest point. A mound of soil was pushed upward at the north edge of the crater. The lip was approximately 8 inches high. A ground scar ran from the base of the center tree and lip of the impact crater toward the southeastern-most tree in the stand. The ground scar was approximately 7 feet long, 4 feet wide, and 5 inches at its deepest point, which was near the crater.

The majority of the airplane's main wreckage was located on the north side of the center tree. The airplane wreckage rested predominantly upright and was oriented on a 065-degree magnetic heading. The airplane's engine and propeller hub rested in the impact crater. The engine was oriented on a 065-degree magnetic heading. The propeller hub was buried in the north wall of the crater at a 60-degree downward angle. The propeller hub was broken open. Two of the three propeller blades were broken out at the cuffs. The propeller piston protruded through the front of the hub cylinder. The propeller blade that remained with the hub showed torsional bending, chord wise scratches across the chambered surface, and several nicks along the leading edge.

The airplane's cowl and forward fuselage was broken aft and fragmented to fuselage station (FS) 128.00. The airplane's engine mounts were broken aft and twisted counter-clockwise and outward. The firewall was broken out and bent forward about the aft section of the engine. The nose gear was bent and broken rearward. The wheel hub and tire remained intact. The front windscreen was broken out and fragmented. The glare shield was broken outward and fragmented. The instrument panel was broken aft and fragmented. Flight and engine instruments, radios, and control yokes were broken out. Numerous warning lights, instruments, and radios were located in and around the north side of the impact crater.

The airplane's cabin and baggage compartment were broken aft and opened from FS 154.00 to approximately FS 385.60. The cabin section pieces rested in the vicinity of the impact crater along its northeast edge. The left front seat remained with the cockpit wreckage. The right front

seat and six passenger seats were separated from the cabin floor. All of the cabin windows were broken out and fragmented. The cabin window frames were bent aft and twisted outward. The bottom of the center fuselage section along with the cabin floor was split open along the airplane's keel. The cabin's interior walls and ceiling were broken aft and fragmented.

The cargo pod, beginning at FS 100.00 and running aft to FS 370.80, was broken out, crushed rearward, and fragmented. Sections of the cargo pod were located south of the two center trees. The main landing gear legs were broken aft.

The airplane's left wing was crushed rearward beginning at the root and running outward across its entire span. The inboard section of the wing, starting at wing station (WS) 33.50 and proceeding outward to WS 141.20, and the inboard portion of the left flap were crushed aft and broken open. The outer portion of the left flap was broken outward from the flap tracks and crushed aft. The center portion of the left wing from WS 141.20 to WS 228.50 was crushed aft, broken open and fragmented. The left wing was broken open and crushed aft. The smell of aviation fuel was present. The left wing strut was broken out at the wing attachment bolt. The outboard section of the left wing was crushed aft and broken open. The left wing tip was broken longitudinally and fragmented. The left aileron was broken out at the hinges.

The airplane's right wing was broken aft at the wing root (WS 35.00) and crushed aft and upward across its entire span. The leading edge was broken open from the root to WS 214.30. The forward spar and right wing strut were broken out. The bottom attachment fitting for the right wing strut remained attached at the fuselage. The right wing was broken open and crushed aft. The smell of aviation fuel was present. The outboard section of the right wing, beginning at WS 244.48, was flattened. The right wing tip was separated longitudinally from the wing. The right aileron was broken outward, crushed inward and buckled. The aileron was folded over onto the outer top surface of the right flap. The right flap was in the retracted position. The flap surface was buckled and bent aft.

The airplane's aft fuselage and empennage were bent upward and broken circumferentially starting at FS 384.85. The empennage rested inverted on top of the airplane's engine. The fin leading to the vertical stabilizer was broken outward, crushed, and fragmented. The vertical stabilizer and rudder were crushed aft and bent approximately 30 degrees to the right. The right horizontal stabilizer and right elevator were crushed aft and broken near stabilizer station (SS) 80.60. The left horizontal stabilizer and rudder were crushed aft and bent upward approximately 30-degrees at SS 67.80. A 15-foot section of tree trunk, which resembled the top portion of the northwestern-most tree in the stand of three trees, rested on top of the empennage.

Both main landing gear wheels were broken aft at the bottom portions of the gear legs. The airplane's left main wheel, brake, and tire were located 327 feet north-northeast of the airplane main wreckage. The right main wheel, brake, and tire were located 225 feet south-southeast of the airplane main wreckage. Pieces of the airplane's battery were located on the east side of the asphalt road beginning approximately 170 feet from the airplane main wreckage and running along a 068-degree magnetic heading.

A debris field surrounded the airplane main wreckage and extended outward from the wreckage for approximately 90 to 100 feet in all directions. The debris field encompassed fragmented pieces of clear Plexiglas, white-colored paint chips, small metal pieces, pieces of chopped branches, pieces of cabin interior, instrument components, aeronautical charts,

personal effects, and two propeller blades. Many of the pieces of chopped branches showed 45 to 60-degree angular cuts. The two propeller blades showed torsional and aft bending, chord wise scratches, and nicks along the leading edges. A gyro case from the airplane's attitude indicator was examined and showed rotational scoring on its inside wall.

The following instruments were examined at the accident site and showed the following readings:

Altimeter: 6,580 feet

Kollsman window setting: 30.10

Magnetic compass: Functional

The following instruments and components were located and found destroyed:

Heading situation indicator

Artificial horizon

Course indicator

Autopilot

Annunciator panel

Airspeed Indicator

An examination of the airplane's systems showed no pre-impact anomalies.

The following components were examined at the accident site and showed the following readings. These items were secured and retained for further testing and examination:

Inter-Turbine Temperature (ITT) indicator: 820 degrees

Propeller Tachometer indicator: 1,620 RPM

Engine Tachometer Percent RPM (Ng) indicator: 66.5 percent

De-ice Valve assembly: impact damaged

PT6A-114A engine: impact damaged

Turn Coordinator: impact damaged

Directional Gyro: impact damaged

Fuel Flow indicator: impact damaged

Torque indicator: impact damaged

Oil Temperature indicator: impact damaged

Auto Pilot (mode) Annunciator: impact damaged

MEDICAL AND PATHOLOGICAL INFORMATION

The Coconino County Medical Examiner conducted an autopsy on the pilot on November 9, 2002, at Flagstaff, Arizona.

FAA toxicology of samples taken from the pilot were negative for all tests conducted.

TESTS AND RESEARCH

On February 20, 2003, the Inter-Turbine Temperature (ITT) (S/N 02E275D), Propeller Tachometer (S/N 02B199), and Engine Tachometer Percent RPM (Ng) (S/N 02E41) indicators were examined and tested in Wichita, Kansas. The ITT indicator was damaged such that it could not provide reliable data. Testing of the Propeller Tachometer showed that all evaluated factors met the indicator's calibration requirements. The Engine Tachometer Percent RPM (Ng) indicator showed that all evaluated factors were within the min/max input range, which met the indicators calibration requirements.

On April 4, 2003, the De-Ice System valves were examined at the Cessna Aircraft Company, Wichita, Kansas. According to a laboratory engineer, the three de-ice valves, (S/N N19,550, N19,553, and N19,560) showed no significant external damage. The examination of the valves showed no external pre-impact anomalies that could have precluded their proper operation in flight.

The airplane's engine was examined at the Pratt & Whitney Canada, Service Investigation Facility, St. Hubert, Quebec, Canada, on April 15, 2003. The examination showed contact signatures to the engine's internal components characteristic of the engine developing significant power at the time of impact. The engine displayed no anomalies that would have precluded normal operation prior to impact. See attached extract from the Pratt & Whitney Canada report 02-090.

On June 19, 2003, the Turn Coordinator (S/N 64175), Directional Gyro (S/N 2205-16), Fuel Flow indicator (S/N 0217-XXX, last three digits unreadable), Torque indicator (S/N E22594), Oil Temperature (S/N E22222), and Auto Pilot (mode) Annunciator (S/N 1626) were examined at the NTSB's Office of Research and Engineering Materials Laboratory in Washington D.C.

The Directional Gyro was disassembled and the gyroscope rotor and housing were examined. In several locations, the purple surface coating on the gyroscope rotor had been completely rubbed though. The gyroscope housing showed several purple colored rotational marks on its side. The Turn Coordinator was disassembled and one continuous score mark was found on the gyroscope rotor. The score mark corresponded to the location of a deformation in the gyroscope housing. No needle transfer marks were found on the faceplates of the Fuel Flow indicator, Torque indicator, and Oil Temperature indicator. The Auto Pilot (mode) Annunciator light labeled TRIM displayed significant stretching and deformation to the filament consistent with a hot impact. However, none of the other lights showed evidence of hot stretching or severe relaxation of the filament coils.

According to Honeywell/Bendix, the manufacturer of the Auto Pilot (mode) Annunciator, the trim light on the annunciator (or the Trim Fail Light) is controlled directly by the hardware trim runaway monitor. The monitor is exercised and checked during the pre-flight test (PFT), and also runs continuously during normal operation. The monitor ensures that: (1) when pitch clutch is engaged for auto-trim, the motor is running in the same direction as the strain gauges are sensing; (2) when pitch clutch is engaged for manual trim, the motor is running in the same direction as the switches are commanding and; (3) that in reference to the strain gauge themselves, the two inputs must have proper polarities and values comparing to strain gauge reference, and the reference itself is valid. Any of the above three conditions can turn the trim

light on during normal operation. Once the trim light comes on it "latches" and will only reset during a power cycle where PFT is run.

ADDITIONAL INFORMATION

According to the Cessna Model 208B pilot's operating handbook (POH), Supplement S1, "Known Icing Equipment," under Section 2 , Limitations, it states the "maximum weight for flight into known icing with cargo pod installed is 8,550 pounds." Under Section 3, Emergency Procedures, "Inadvertent Icing Encounter at Weights Above 8,550 pounds (with cargo pod installed), it states "4. Turn back or change altitude to leave icing conditions as soon as possible."

The aircraft was not equipped with a factory installed cargo pod de-ice boot.

According to Cessna's calculated performance data (using the actual occupant and cargo weights and the current weight and balance of the airplane), the airplane's take-off weight was 8,723 pounds.

Parties to the investigation were the FAA Flight Standards District Office, Scottsdale, Arizona, the Cessna Aircraft Company, and Pratt & Whitney, Canada.

The airplane wreckage was released to the owner's representative on September 11, 2003.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	32, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	01/07/2002
Occupational Pilot:		Last Flight Review or Equivalent:	06/08/2002
Flight Time:	1880 hours (Total, all aircraft), 77 hours (Total, this make and model), 1187 hours (Pilot In Command, all aircraft), 87 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Co-Pilot Information

Certificate:	Private	Age:	43, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/08/2002
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	638 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N514DB
Model/Series:	208B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	208B0971
Landing Gear Type:	Tricycle	Seats:	8
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	8785 lbs
Time Since Last Inspection:		Engines:	1 Turbo Prop
Airframe Total Time:		Engine Manufacturer:	Pratt & Whitney Canada
ELT:	Installed, not activated	Engine Model/Series:	PT6A-114A
Registered Owner:	Brown County Financial Services LLC	Rated Power:	675 hp
Operator:	Brown County Financial Services LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FLG, 7014 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	0956 MST	Direction from Accident Site:	110°
Lowest Cloud Condition:	Thin Broken / 33 ft agl	Visibility	10 Miles
Lowest Ceiling:	Overcast / 44 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	22 knots / 27 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	6°C / -3°C
Precipitation and Obscuration:			
Departure Point:	Las Vegas, NV (LAS)	Type of Flight Plan Filed:	IFR
Destination:	Midland, TX (MAF)	Type of Clearance:	IFR
Departure Time:	0819 PST	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 Fatal	Latitude, Longitude:	35.224722, -111.931944

Administrative Information

Investigator In Charge (IIC):	David C Bowling	Report Date:	05/30/2006
Additional Participating Persons:	Will Willbanks; FAA FSDO; Scottsdale, AZ Bruce Bassette; FAA FSDO; Scottsdale, AZ Todd Sigler; Cessna Aircraft Company; Wichita, KS Thomas A Berthe; Pratt & Whitney Canada; Longueuil, CB		
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.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).