National Transportation Safety Board
Aviation Accident Final Report

Location:	Leominster, MA	**Accident Number:**	IAD03FA043
Date & Time:	04/04/2003, 0935 EST	**Registration:**	N257CG
Aircraft:	Beechcraft B200	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	6 Fatal, 1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

While on approach to the airport, the airplane entered a left turn, which the surviving passenger described as "almost completely upside down." The airplane briefly leveled, then entered another left turn with a bank angle of the same severity. The airplane seemed to roll level, then entered a steep dive, until it impacted a building. The passenger reported that the engines were running normally throughout the entire flight, and the steep turns performed by the pilot did not concern her, as she had flown with him before and knew he "liked to make sharp turns." Examination of the airplane and engines revealed no pre-impact mechanical anomalies, and weather at the time of the accident included a broken cloud ceiling of 1,100 feet, with 3 miles visibility in mist. According to the FAA, Airplane Flying Handbook,"...[An] airplane will stall at a higher indicated airspeed when excessive maneuvering loads are imposed by steep turns, pull-ups, or other abrupt changes in its flightpath." A review of the "Stall Speeds - Power Idle" chart from the POH revealed that with approach flaps selected, at a bank angle of 60 degrees, the airplane would stall at about 123 knots. Radar data indicated the airplane descended along the approach course at an average speed of 120 knots. Toxicology testing performed on the pilot revealed imipramine and carbamazepine in the pilot's urine and blood, and morphine in the pilot's urine. According to the pilot's medical and pharmacy records, he suffered from a severe neurological disorder, possibly a seizure disorder, which resulted in frequent, unpredictable episodes of debilitating pain. Additionally, approximately three months prior to the accident, the pilot was diagnosed with viral meningitis, and a severe skin infection with multiple abscesses on his extremities. The pilot had been prescribed imipramine, an antidepressant that has detrimental effects on driving skills and other cognitive functions. He had also been prescribed carbamazepine, typically used to control seizures or treat certain chronically painful conditions. Carbamazepine has measurable impairment of performance on a variety of psychomotor tests. Morphine, a prescription opiate painkiller, is also a metabolite of heroin and many prescription medications, such as codeine, used to control moderate pain. No indication was observed in the pilot's medical records that he was recently prescribed any opiates. Neither the pilot's medical condition, nor the medication he was routinely taking was reported on his application for an airman medical certificate.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's low altitude maneuver using an excessive bank angle, and his failure to maintain airspeed which resulted in an inadvertent stall and subsequent collision with a building. A factor was the pilot's impairment from prescription medications.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CIRCLING (IFR)

Findings
1. (C) LOW ALTITUDE FLIGHT/MANEUVER - PERFORMED - PILOT IN COMMAND
2. (F) PHYSICAL IMPAIRMENT(STROKE) - PILOT IN COMMAND
3. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
4. STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - UNCONTROLLED

Findings
5. OBJECT - BUILDING(NONRESIDENTIAL)

Factual Information

HISTORY OF FLIGHT

On April 4, 2003, at 0935 eastern standard time, a Beechcraft B200, N257CG, was substantially damaged when it impacted a building in Leominster, Massachusetts, while on approach to Fitchburg Municipal Airport (FIT), Fitchburg, Massachusetts. The certificated airline transport pilot, the pilot-rated passenger, and four additional passengers were fatally injured. One passenger was seriously injured, and one person inside the building received minor injuries. Instrument meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan had been filed for the flight that departed LaGuardia International Airport (LGA), Flushing, New York, at 0831. The personal flight was conducted under 14 CFR Part 91.

The accident flight departed the Laurence G. Hanscom Field (BED), Bedford, Massachusetts at 0700, and flew to LaGuardia with only the pilot and pilot-rated passenger onboard. At LaGuardia, five additional passengers boarded the airplane, which subsequently departed on an IFR flight plan to Bedford. While en route, the crew amended the destination to Fitchburg. According to the surviving passenger, the intent was to drop off two passengers at Fitchburg, then continue on to the Martha's Vineyard Airport, Vineyard Haven, Massachusetts, with the remaining passengers.

According to air traffic control (ATC) transcripts provided by the Federal Aviation Administration (FAA), the pilot contacted the Bridgeport Flight Service Station (FSS), about 2050, on the evening prior to the accident. The pilot stated that he would be departing Bedford the following morning, at 0700, and requested specific weather for Bedford, Martha's Vineyard, and LaGuardia. The forecasts were provided, and the pilot stated that he would call back in the morning.

The pilot again called the Bridgeport FSS on the morning of the accident, at 0616, and requested specific weather for Fitchburg, and LaGuardia. He also requested Pilot Weather Reports (PIREPS) for icing and turbulence. The FSS specialist provided him with the requested weather.

At the same time, 0616, the pilot-rated passenger called the Burlington FSS and obtained a preflight weather briefing for an IFR flight from Bedford to Nantucket, Massachusetts, then to LaGuardia. The pilot-rated passenger also obtained several outlook briefings for possible flights between Nantucket and LaGuardia.

A review of ATC communications revealed that the pilot contacted Boston TRACON at 0918, and requested the GPS RWY 14 approach at Fitchburg.

At 0921, the airplane was cleared for the approach.

At 0923, the controller asked N257CG, "you just gonna ah go to the v o r and turn inbound on the approach"

The pilot responded, "affirm seven charlie golf," and at 0923, stated, "actually I suppose direct ah with that adiss would be okay."

The pilot was asked to repeat his transmission, and he again stated, "direct adiss or whatever you call it would be fine too."

At 0925, the pilot was asked if he had the weather at Fitchburg, and he replied "affirmative."

At 0927, the pilot stated, "and ah king air two five seven Charlie golf on the way to whatever its called."

The pilot was instructed to repeat his transmission and at 0928 stated, "direct canat for seven charlie golf."

At 0928, the pilot was advised to "change to advisory and report cancellation in the air or promptly on the ground with Bridgeport FSS."

At 0929, the pilot responded, "it will probably be on the ground, thanks seven charlie golf."

No further transmissions were received, by ATC, from the airplane.

A review of radar data revealed that a target emitting the same transponder code as the accident airplane descended along the GPS RWY 14 final approach course at an average groundspeed of 120 knots. The target descended from 2,800 feet at the final approach fix, to 1,600 feet at the missed approach point (MAP). After crossing the MAP at 0932, the target maintained approximately the same course, and continued to descend, passing over the approach end of runway 02 at an altitude of about 1,300 feet. It continued along the same course, until the last radar return was recorded at an altitude of 800 feet, at 0934. The last radar return was positioned to the left of course, and was located at 42 degrees, 32 minutes north latitude, 71 degrees, 44 minutes west longitude, on a magnetic heading of 165 degrees, approximately 1 nautical mile from the threshold of runway 32.

According to the surviving passenger, "everything seemed fine" during the flight, until her father reported they were circling the airport and were "close to landing." The passenger subsequently felt the airplane enter a left turn, in which the airplane became "almost completely upside down." The airplane briefly straightened out, then entered another left turn with a bank angle of the same severity. The airplane then seemed to roll level "just for a second," then entered a dive "straight down" until it impacted the building.

The passenger also noted that the engines were running "normally" throughout the entire flight, and did not recall any unusual sounds. In addition, the steep turns did not concern her, as she had flown with the accident pilot before and knew he "liked to make sharp turns."

The passenger further noted that she was unable to see the ground during the sequence of turns, but saw it briefly "just a split second before the impact."

In a written statement, a witness who was working at the airport at the time of the accident, reported hearing the flightcrew of the accident airplane call in on the Unicom frequency, and ask about runway conditions. Airport personnel responded that the braking action was "fair." The flightcrew then asked if there was any additional traffic in the pattern or vehicles on the runway, which the airport personnel replied "negative." The flightcrew then stated, "Well, if there is anyone on the runway, tell them to get off because we're coming in!"

The witness further recalled hearing the flight being vectored by air traffic control, over the radio. The flightcrew was vectored for the GPS Runway 14 approach at Fitchburg, and reported accepting a vector for the "whatever approach fix."

After hearing the radio transmissions from the flight, the witness walked outside and observed the airplane approaching the airport directly over runway 14 "going in and out of low scattered clouds." The airplane turned slightly to the right to join a left downwind for runway 32, "in close, and very slow and low." The airplane continued on a close tight downwind, making a

slight left turn, then a steep left base-to-final turn, "90-degrees wings up." The witness then observed the airplane disappear behind the tree line in a left wing-down attitude.

Several other witnesses observed the airplane during the accident sequence. One witness, who was familiar with the airport traffic pattern, observed the airplane at an altitude of approximately 450 feet as it made a "continual" left base-to-final turn. The nose of the airplane was "being held level, until the airplane stalled and descended to the ground."

A second witness observed the airplane make a turn "so sharp that the wings were vertical," then enter a "nose-dive."

A third witness observed the airplane flying east, "just above the tree line and just below the cloud deck." The airplane's landing gear were down and both propellers were turning. The airspeed was "extremely slow," and the airplane appeared to be flying with "not enough lift." In addition, the weather conditions were "extremely poor," with a low cloud deck and freezing rain.

The accident occurred during the hours of daylight at 42 degrees, 32 minutes north latitude, and 71 degrees, 44 minutes west longitude, about 1 nautical miles from the approach end of runway 32.

PILOT INFORMATION

The pilot held an airline transport pilot certificate, and was a certified flight instructor and ground instructor. His most recent second-class FAA medical certificate was issued on April 16, 2002, at which time, he reported 5,600 hours of total flight experience . According to his last insurance renewal form, dated May 6, 2002, the pilot reported 6,100 hours of total flight experience, of which 332 hours were in the same make and model as the accident airplane. The pilot also reported 1,772 hours of flight time in the Beechcraft B90.

The pilot kept track of his flight time on his personal computer, using a series of spreadsheets. Several of those computer spreadsheets were provided by the pilot's family, detailing flights which occurred from May 5, 1998 to March 28, 2003. The pilot had accumulated 1,334 hours in the accident airplane during that period.

AIRCRAFT INFORMATION

Examination of maintenance records for the airplane revealed it was on a phase inspection program. The last phase inspection was performed on December 6, 2002, and no abnormalities were noted with the records.

METEOROLOGICAL INFORMATION

A Safety Board meteorologist performed a weather study of conditions at the time of the accident. According to the report, a stationary front was present between two low pressure systems, and the accident site was located to the north of the stationary front. A National Weather Service (NWS) Weather Depiction chart depicted a large area of IFR conditions and MVFR conditions along the north of the stationary front. Station models in the area indicated overcast ceilings ranging from 700 to 1,400 feet, and visibility from 1-1/2 to 5 miles in fog, freezing rain, and light snow across the region.

A special weather observation recorded at FIT, at 0931, included wind from 070 degrees at 9 knots, visibility 3 miles in mist, ceiling broken at 1,100 feet agl, overcast clouds at 1,700 feet, temperature 29 degrees Fahrenheit, dew point 27 degrees Fahrenheit, and barometric pressure

of 30.15 inches Hg.

AIDS TO NAVIGATION

The GPS RWY 14 approach was a T-shaped approach with entries from the northeast and southwest. The final approach course, 158 degrees magnetic, began at waypoint EIRRO. The final approach course passed through the final approach fix, KENAT, to the missed approach point, OLLIV, 0.3 nautical mile from the approach end of runway 14. Minimum altitudes at KENAT and OLLIV were 2,800 feet msl and 1,600 feet respectively. The minimum descent altitude for the approach was 1,320 feet msl, for both the straight-in and circling arrival.

The FAA performed a flight check of the GPS RWY 14 approach at FIT, following the accident. No deficiencies were noted with the approach.

AERODROME INFORMATION

The touchdown zone elevation for runway 14 was 341 feet msl, and for runway 32 it was 336 feet msl. The runway length was 4,511 feet.

FLIGHT RECORDERS

Cockpit Voice Recorder

The cockpit voice recorder (CVR) was successfully downloaded by the Safety Board's Vehicle Recorder Division; however, the audio recovered did not pertain to the accident flight, and appeared to have been from a previous flight on the airplane occurring months prior to the accident.

The aircraft's G-switch was recovered from the wreckage and examined by a Safety Board recorder specialist. According to the specialist's report, when the G-switch was tested, it was in the activated state; thus, it had experienced enough force, either prior to the accident or during the accident sequence, to trigger the signal which removed power to the CVR. The switch was further tested, and it was determined to activate with marginal force. Due to structural damage, the CVR could not be tested to determine if it was operational at the time of the accident.

Flight Data Recorder

There was no flight data recorder installed in the airplane, nor was it required.

WRECKAGE AND IMPACT INFORMATION

The accident site was located about 1 mile from the approach end of runway 32 at the Fitchburg Airport. Examination of the site on April 4-5, 2003, revealed that all components of the airplane were accounted for at the scene. The airplane impacted the east wall of a single-story sheet metal factory; a white paint transfer mark was observed on the outside of building's south wall, about 1-1/2 feet below the roof and 14 feet above the ground. An outboard section of the airplane's left wing was found at the base of the wall, near the transfer mark.

Direct damage to the building extended across the building's roof area and back (east) wall. The direction of the debris/damage path, from the paint transfer mark to the main wreckage, was about 030 degrees magnetic. Along the path, the building's roof was collapsed and missing, and the back wall, in the area of the debris path, was destroyed, with the majority of the wall debris projected outward.

The main wreckage of the airplane was located just behind the building, amidst the wall and roof debris. The nose of the airplane was crushed aft, and the right side of the forward cockpit outer skin displayed brown paint transfer and aft crushing at a 45-degree angle. The airplane came to rest heading 310 degrees magnetic.

The cockpit and forward fuselage section of the airplane were severely fire-damaged; however, a number of instrument indications were obtained. The pilot's airspeed indicator needle was positioned at 60 knots, and the co-pilot's airspeed indicator needle was positioned at 66 knots. The propeller, throttle, and condition levers were in the full forward positions, and the landing gear handle was in the down position. The pitch trim wheel indicated 8 units up, the aileron trim wheel indicated 3 units left, and the rudder trim wheel was illegible.

The fuselage and empennage sections remained attached; however, there was a tear in the empennage skin, about 1 foot forward of the vertical stabilizer attachment point, which encircled most of the empennage. Both the forward and aft edges of the torn area on the top of the empennage displayed downward bending.

The rudder and the horizontal stabilizer remained attached to the vertical stabilizer.

The left wing was located partially under the fuselage, and the outboard section of the wing was separated outboard of the engine nacelle. Flight control continuity was established from the section breaks to the wing root.

The left engine remained attached to the wing by cables and wires. The left propeller assembly was separated from the engine and buried under building debris. Examination of the propeller shaft revealed circumferential scoring, and the exhaust housing displayed no indications of outward dimples or pockmarks.

All four blades of the left propeller remained attached to the propeller hub. Two of the blades were broken about mid span from the hub. The remaining two blades displayed "S-bending" throughout, and large nicks and gouges at the tips.

The right wing was separated into several sections, all contained within the immediate vicinity of the main wreckage. The separated inboard section of the wing contained the landing gear, which was in the extended position. Both the right inboard and outboard flaps, and the right aileron were separated. Flight control cable continuity was confirmed from the section breaks to the fuselage. A measurement of the flap actuator revealed the flaps were in the approach position.

The right engine was separated from the wing and located about 20 feet from the main wreckage. The right propeller assembly was separated from the engine at the propeller shaft. Examination of the propeller shaft fracture area revealed gouging and circumferential scoring around the shaft. The engine's first stage compressor, guide vanes, and shroud were examined and the blades and vane airfoils were intact. The blade tips, shroud, and vane ring outer drum exhibited circumferential rubbing and scoring. The exhaust housing displayed no indications of outward dimples or pockmarks.

Three of the four blades to the right propeller remained attached to the propeller hub. The fourth blade was separated from the assembly and impaled in the ground. All four blades displayed S-bending and leading edge gouging.

The engines were removed from the airplane and examined on June 5, 2003. Both engines displayed severe fire and impact damage. On both engines, circumferential rubbing and machining were displayed by the compressor turbine guide vane ring, the compressor turbine, the first stage power turbine guide vane ring, and the first stage power turbine. Also observed on both engines, the compressor first stage shroud, the compressor turbine shroud, and the first and second stage power turbine shrouds displayed circumferential scoring. The propeller shafts on both engines were fractured consistent with torsional overload.

No pre-impact mechanical anomalies were observed on either engine.

MEDICAL AND PATHOLOGICAL INFORMATION

The Commonwealth of Massachusetts, Office of the Chief Medical Examiner, performed an autopsy on the pilot on April 5, 2003.

The FAA Toxicology and Accident Research Laboratory, Oklahoma City, Oklahoma conducted toxicological testing on the pilot.

According to the pilot's toxicology test results, 0.096 (ug/ml, ug/g) of DESIPRAMINE was detected in his urine and blood, 0.099 (ug/ml, ug/g) of IMIPRAMINE was detected in his urine and blood, 7.1 (ug/ml, ug/g) of CARBAMAZEPINE was detected in his urine and blood, 0.161 (ug/ml, ug/g) of MORPHINE was detected in his urine, and 85.64 (ug/ml, ug/g) of SALICYLATE was detected in his urine.

Hospital and pharmacy records maintained on the pilot were obtained and reviewed by the NTSB Medical Officer. According to hospital records, the pilot was examined on January 29, 2002. The entry stated that the pilot presented with symptoms of, "head to toe body aches...explosive headaches...episodes of not knowing where he is...Medical History...Seizure...Migraine..." The entry further stated that current medications included Tegretol [carbemazepine] and aspirin. A spinal tap was performed on the pilot, and he was diagnosed with viral meningitis.

On January 23, 2003, a plastic surgery entry stated that the pilot was examined for multiple abscesses on his right upper extremity. The doctor recommended incision and drainage, dressing changes, and admission for intravenous vancomycin. The pilot refused treatment, informing the doctor that he needed to work the following day. The doctor emphasized the risks of refusing treatment, which included "systemic infection, endocarditis, sepsis, necrotizing infection risking viability of right arm and requiring wide debridement." The doctor's note indicated that he "advised patient of risks of flying (piloting an airplane) if bacteremia develops."

On January 28, 2003, a progress note in the records stated that a Methicillin resistant staph aureus infection grew out of the right arm wound. The doctor called the pilot and advised him to either seek help with his regular doctor, or be admitted to the hospital for intravenous vancomycin therapy.

On February 13, 2003, an emergency physician record indicated the pilot was examined at the hospital after falling off stacked boxes, while washing his airplane. The Emergency Physician entry stated, "...Fell back onto left hip... Past History... Seizures...Medications...Tegretol..."

On February 17, 2003, an allergy note in the pilot's records stated, "present medications - Tegretol 100mg two twice a day for seizures, imipramine for muscle relaxation, aspirin 500 mg four times a day..."

The pilot's primary physician was unable to provide the pilots medical chart; however, she provided a letter summarizing his appointments with her. According to the letter, the pilot was last seen by the physician on 2/14/03 and 3/6/03. The physician reported that he sought relief for intermittent shooting pain in his right side, which he described as incapacitating. Previous evaluations by other physicians had not revealed a cause for his symptoms, and he did not receive any ongoing prescriptions for analgesics from the primary physician. The physician stated that the treatment which the pilot experienced the most relief from pain was carbamazepine, 100 mg, three times a day. The physician also thought the pilot was taking imipramine, 150 mg, at night.

Examination of the pilot's pharmacy records revealed he filled prescriptions for imipramine 10 mg (quantity 60), on 2/15/02, 7/18/02, 9/25/02, 10/15/02, 11/27/02, 12/21/02, 1/22/03, and 3/8/03.

The pilot filled prescriptions for imipramine 25 mg (quantity 120) on 2/6/02, 3/18/02, 4/19/02, 5/19/02, 7/18/02, 8/26/02, 10/04/02, 11/11/02, 12/21/02, 2/4/03, and 3/10/03.

The pilot also filled prescriptions for carbamazepine 100 mg (quantity 120), on 1/23/02, 2/21/02, 3/18/02, 4/19/02, 5/19/02, 6/17/02, 7/18/02, 8/17/02, 9/15/02, 10/15/02, 11/11/02, 12/9/02, 1/8/03, 2/4/03, and 3/10/03.

The pilot’s most recent application for Airman Medical Certificate, dated 4/16/02, indicated "no" for item 17.a. "Do you currently use any medication." The application also indicated "no" for item 18.l. "Neurological disorders: epilepsy, seizures, stroke, paralysis, etc.," and "no" for item 19. "Visits to health professional within last 3 years."

ADDITIONAL INFORMATION

According to fuel records provided by the fixed base operator (FBO) at Bedford, the airplane was refueled on April 3, 2003, about 1600, with 359 gallons of jet fuel. Information provided by the Port Authority of New York at LaGuardia Airport revealed that the airplane was not fueled while at LaGuardia.

A review of FAA-H-8083-3, Airplane Flying Handbook, revealed:

"...At the same gross weight, airplane configuration, and power setting, a given airplane will consistently stall at the same indicated airspeed if no acceleration is involved. The airplane will, however, stall at a higher indicated airspeed when excessive maneuvering loads are imposed by steep turns, pull-ups, or other abrupt changes in its flightpath. Stalls entered from such flight situations are called "accelerated maneuver stalls..."

"...Failure to take immediate steps toward recovery when an accelerated stall occurs may result in a complete loss of flight control...

"...At any given airspeed, the load factor increases as angle of attack increases, and the wing stalls because the angle of attack has been increased to a certain angle...The speed at which a wing will stall is proportional to the square root of the load factor."

According to the load factor chart in FAA Advisory Circular 61-23C, Pilot's Handbook of Aeronautical Knowledge, a bank angle of 45 degrees will produce a load factor of 1.4, a bank angle of 60 degrees will produce a load factor of 2, and a bank angle of 80 degrees will produce a load factor of 6 (or 3 times the stalling speed).

A review of the Beechcraft King Air Pilot Operating Handbook (POH) revealed the airplane had

a flight load factor limit of 3.17 positive g's with the flaps up, and 2 positive g's with the flaps down.

A review of the "Stall Speeds - Power Idle" chart from the POH revealed that with approach flaps selected, the airplane would stall at the following speeds:

1) At a weight of 11,000 pounds, and a bank angle of 45 degrees, the stall speed would be about 104 knots.

2) At a weight of 11,000 pounds, and a bank angle of 60 degrees, the stall speed would be about 123 knots.

According to 14 CFR Part 91.17, "No person may act ... as a crewmember of a civil aircraft ... while using any drug that affects the person's faculties in any way contrary to safety."

Wreckage Release

The wreckage was released to a representative of the owner's insurance company on June 5, 2003.

Pilot Information

Certificate:	Airline Transport; Flight Instructor	**Age:**	49, Male
Airplane Rating(s):	Multi-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	**Last FAA Medical Exam:**	04/16/2002
Occupational Pilot:		**Last Flight Review or Equivalent:**	04/24/2002
Flight Time:	6100 hours (Total, all aircraft), 1334 hours (Total, this make and model), 52 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

Co-Pilot Information

Certificate:	Commercial	**Age:**	30, 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:**	07/02/2002
Occupational Pilot:		**Last Flight Review or Equivalent:**	06/18/2002
Flight Time:	1080 hours (Total, all aircraft), 4 hours (Total, this make and model), 960 hours (Pilot In Command, all aircraft), 61 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beechcraft	**Registration:**	N257CG
Model/Series:	B200	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	BB-1739
Landing Gear Type:	Retractable - Tricycle	**Seats:**	11
Date/Type of Last Inspection:	12/06/2002, 100 Hour	**Certified Max Gross Wt.:**	12500 lbs
Time Since Last Inspection:	53 Hours	**Engines:**	2 Turbo Prop
Airframe Total Time:	359 Hours as of last inspection	**Engine Manufacturer:**	Pratt & Whitney Canada
ELT:	Installed, not activated	**Engine Model/Series:**	PT6A-42
Registered Owner:	FS Corsair Inc.	**Rated Power:**	850 hp
Operator:	FS Corsair Inc.	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	FIT, 348 ft msl	**Distance from Accident Site:**	2 Nautical Miles
Observation Time:	0931 EST	**Direction from Accident Site:**	340°
Lowest Cloud Condition:		**Visibility**	3 Miles
Lowest Ceiling:	Broken / 1100 ft agl	**Visibility (RVR):**	
Wind Speed/Gusts:	9 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	70°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.15 inches Hg	**Temperature/Dew Point:**	-2°C / -3°C
Precipitation and Obscuration:			
Departure Point:	New York, NY (LGA)	**Type of Flight Plan Filed:**	IFR
Destination:	Fitchburg, MA (FIT)	**Type of Clearance:**	IFR
Departure Time:	0831 EST	**Type of Airspace:**	Class G

Airport Information

Airport:	Fitchburg Municipal Airport (FIT)	**Runway Surface Type:**	Unknown
Airport Elevation:	348 ft	**Runway Surface Condition:**	Unknown
Runway Used:	32	**IFR Approach:**	Circling; Global Positioning System
Runway Length/Width:	4510 ft / 100 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	2 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:	4 Fatal, 1 Serious	**Aircraft Fire:**	On-Ground
Ground Injuries:	1 Minor	**Aircraft Explosion:**	None
Total Injuries:	6 Fatal, 1 Serious, 1 Minor	**Latitude, Longitude:**	42.536944, -71.739444

Administrative Information

Investigator In Charge (IIC):	Jill M Andrews	**Report Date:**	09/01/2004
Additional Participating Persons:	Bob Mehegan; FAA/FSDO; Windsor Locks, CT Tom Berthe; Pratt & Whitney Engines; Burlington, VT Brian Cassidy; Raytheon Aircraft Company; Wichita, KS Richard Bunker; Commonwealth of Massachusetts; Boston, MA		
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.ntsb.gov/pubdms/.		