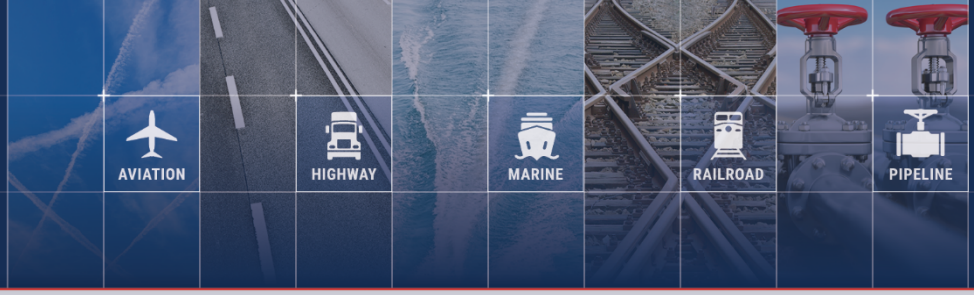

Aviation Investigation Final Report

Location:	Bellefonte, Pennsylvania	**Accident Number:**	IAD05FA047
Date & Time:	March 26, 2005, 13:48 Local	**Registration:**	N770G
Aircraft:	Pilatus PC-12/45	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	6 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The accident airplane was on an instrument landing system (ILS) approach to land, when witnesses reported seeing it spinning in a nose down, near vertical attitude before it collided with the ground. The accident site was about 3 miles from the approach end of the intended runway. A review of radar data disclosed that the private pilot had difficulty maintaining altitude and airspeed while on final approach, with significant excursions above and below the glidepath, as well as large variations in airspeed. Interviews with other pilots in the area just prior to and after the accident revealed that icing conditions existed in clouds near the airport, although first responders to the accident site indicated that there was no ice on the airplane. Postaccident inspection of the airplane, its engine and flight navigation systems, discovered no evidence of preimpact anomalies. An analysis of the airplane's navigation system's light bulbs, suggests that the pilot had selected the GPS mode for the initial approach, but had not switched to the proper instrument approach mode to allow the autopilot to lock onto the ILS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain sufficient airspeed to avoid a stall during an instrument final approach to land, which resulted in an inadvertent stall/spin. Factors associated with the accident are the inadvertent stall/spin, the pilot's failure to follow procedures/directives, and clouds.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings
1. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
2. (F) STALL/SPIN - INADVERTENT - PILOT IN COMMAND
3. (F) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
4. (F) WEATHER CONDITION - CLOUDS

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

Findings
5. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On March 26, 2005, at 1348 eastern standard time, a Pilatus PC-12/45, N770G, was destroyed when it impacted the ground near Bellefonte, Pennsylvania. The certificated private pilot and five passengers were fatally injured. Visual meteorological conditions prevailed at the accident site; however, instrument meteorological conditions prevailed at the altitude where the accident sequence began. The airplane was operating on an instrument flight rules flight plan, and departed Naples Municipal Airport (APF), Naples, Florida, about 0953, destined for University Park Airport (UNV), State College, Pennsylvania. The personal flight was conducted under 14 CFR Part 91.

According to representatives of the two families onboard, the airplane was en route to State College so family members could watch a son's lacrosse game. The families then intended to return home to the Providence, Rhode Island area.

A review of voice communications and radar data indicated that the airplane was inbound on the RWY 24 ILS instrument approach, when, at 1345, the pilot was advised by the New York Center controller that he could change from the New York Center radio frequency, to the University Park common traffic advisory frequency. After the pilot acknowledged the advisory, there were no further transmissions from him. The last radar return, at 1348, indicated the airplane was about 3,500 feet, 3 nautical miles from the runway and 2 nautical miles inside PENUE LOM, the final approach fix for the localizer instrument approach.

Near the accident site, a witness saw the airplane flying overhead. His attention had been drawn to it due to the amount of time it had been there. He looked up and saw the airplane "banking steeply" before it started "spiraling down" in a "counter-clockwise," nose low, left turn. The wings were "almost straight up and down," and the airplane made "8-10 circles" before briefly recovering. The witness then saw the airplane "gain slight control" before it disappeared behind a tree line.

Several other witnesses were interviewed by Pennsylvania State Police officers. One witness reported seeing the airplane over some pine trees, near a new correctional facility. "Its right wing was up and then it went nose down to the ground after doing a counter-clockwise spin." Additional witnesses reported seeing the airplane "with its left wing down and right wing up, doing a spin toward the ground," and "nose down doing approximately three to four slow revolutions to the earth."

Another witness was riding in a vehicle when he heard a "loud whoosh" over his car. The airplane impacted the ground nearby in a nose-down, slightly left bank attitude, and the tail of

the airplane "ripped off." The witness rushed from his car to try and help, and did not see any ice on the airplane or on the ground, and did not feel any ice when he was walking on the wing to try to assist the occupants.

An off-duty EMS responder was driving nearby and saw the airplane in an "extreme nosedive," but didn't see it spiraling. He then saw it hit the ground, and rushed to the scene to help. He also noted that there was no ice on the airplane.

An initial responder to the scene was an off-duty Pennsylvania State Police corporal whose primary job with the State Police was vehicular accident reconstruction. The corporal stated that he did not see the accident, but responded to the scene "within seconds" of its occurrence. The corporal noted no ice on the airplane, and photographs he took of it about 15 minutes later revealed no presence of ice.

The Director of Centre County, Office of Emergency Services, also stated that none of his first responders saw ice on the airplane.

The accident occurred during the hours of daylight, in the vicinity of 40 degrees, 52.73 minutes north latitude, 77 degrees, 46.64 minutes west longitude.

PERSONNEL INFORMATION

The pilot held a private pilot certificate, with airplane single engine land, airplane multi-engine land, and instrument airplane ratings. On his latest Federal Aviation Administration (FAA) third class medical certificate application, dated February 1, 2005, the pilot reported 1,900 hours of total flight time.

According to training records, the pilot completed Pilatus PC-12 initial training at a SimCom training center on March 20, 2003, and completed recurrent training at SimCom on March 8, 2004, and March 22, 2005. On his application for the March 22, 2005, training, the pilot wrote that he had 1,645 total flight hours, 385 instrument flight hours, 250 flight hours in the previous 12 months, and 173 hours of flight time in the PC-12.

AIRCRAFT INFORMATION

The airplane, serial number 299, was manufactured in 1999, and powered by a Pratt and Whitney Canada PT6A-67B engine. The airplane was originally registered in France, but subsequently registered to J2W Aviation, LLC, on April 30, 2003. According to a family representative, the LLC was 60 percent owned by the pilot, 20 percent owned by one of the passengers, and 20 percent owned by a third person.

Airplane operating hours were not available at the accident scene. However, according to logbook records, the airplane's latest 100 hour inspection was completed on December 1, 2004, at 1,523 operating hours, and an engine compressor wash was accomplished on March

9, 2005, at 1,612 hours.

The airplane was equipped with inflatable neoprene de-ice boots on the leading edges of the wings and horizontal tail surfaces. According the airplane's Pilot's Information Manual, "the purpose of the [boots] is to inflate and dispense any ice which may accrete on their surface during flight in atmospheric icing conditions." The boots were to be operated by the pilot by moving a switch on the DE-ICING control panel.

According to the airplane's flight manual, section 4.23, "detection of icing conditions and ice accretion on the aircraft is by the pilot visual identification on the left hand wing leading edge." In addition, a representative from Pilatus stated that a pilot could also see ice forming on a 2-inch strip around the windshields where they weren't heated.

METEOROLOGICAL INFORMATION

Weather, reported at 1400, at University Park Airport, included winds from 130 degrees true, at 3 knots, overcast skies at 1,700 feet above the ground, temperature 39 degrees Fahrenheit, dew point 32 degrees Fahrenheit, and an altimeter setting of 30.10 inches Hg. The accident site elevation was about 150 feet lower than the airport elevation.

There were two AIRMETs (weather advisories) in effect. One, issued at 1215, and valid until 1600, called for occasional moderate rime and/or mixed icing in cloud and precipitation between 6,000 feet and 13,000 feet. Another AIRMET, issued at 1405, and valid until 1600, updated the previous advisory and called for occasional moderate rime and/or mixed icing in cloud and precipitation below 13,000 feet, with conditions continuing beyond 1600.

The pilot of a Beech Travel Air landed at University Park Airport at 1332, and reported that he had been inbound at 7,000 feet, then descended to 6,000 feet, encountering clouds about 6,500 feet. At 6,000 feet, the temperature was 22 degrees, and the airplane "started picking up a little ice." The pilot was then told by air traffic control to descend to 4,000 feet. As he descended, the airplane "picked up more ice," which was "mixed, but more clear ice than rime ice." The pilot then held for 10-15 minutes, and picked up a total of 2 - 2 1/2 inches of ice on the leading edges of the wings. The windshield heat was on, and slush ran off the windshield. The pilot noted that the temperature was 27 degrees. He subsequently declared an emergency, and flew the ILS RWY 24 approach. When the airplane cleared the clouds, the ice "immediately started peeling off the airplane;" however, upon landing, there was still some ice on wing leading edges, cowlings and air filters.

A second pilot was flying a Cessna 172 to University Park from Williamsport, Pennsylvania, at 4,000 feet. When he initially left Williamsport, the sky was clear; however, as he neared the initial approach fix for the ILS RWY 24 approach, he was "totally in the clouds," but experienced no icing. The landing, at 1320, was uneventful. The pilot subsequently prepared for a takeoff back to Williamsport, but due to the missing Pilatus, had to wait until 1449. The pilot departed to the south, and was instructed by air traffic control to head 100 degrees magnetic, and climb

to 5,000 feet. About 5-8 minutes after takeoff, approximately 3,500 feet, the airplane began to pick up some icing, and by 5,000 feet, had moderate icing. The pilot was not able to hold altitude, and requested a return to University Park. Once the airplane cleared the clouds, about 1,700 feet, ice began to come off the airplane, including the propeller. The pilot subsequently landed about 90 knots, and after shutdown, noticed about 1/8 inch of clear ice still on the airframe.

AIRPORT INFORMATION

University Park Airport had two runways, 06/24 and 16/34. Runway 24 was 6,701 feet long and 150 feet wide. Published elevation was 1,239 feet above mean sea level (msl). There was no operating control tower at the airport.

AIDS TO NAVIGATION

The ILS RWY 24 approach included an inbound course of 244 degrees magnetic. PENUE LOM was located along the inbound course, at a glide slope elevation of 3,092 feet msl, 5.5 nautical miles from the runway. The missed approach point was located along the inbound course, at a glide slope elevation of 1,426 feet msl, or 200 feet above the runway threshold.

On March 29, 2005, as a result of the accident, the ILS was flight-checked by the FAA, and found to be "satisfactory."

WRECKAGE AND IMPACT INFORMATION

The wreckage was located next to an asphalt driveway adjoining a newly-constructed, but unoccupied, correctional facility, about 3.3 nautical miles, 070 degrees magnetic from the end of the runway. The wreckage path, initially heading 040 degrees magnetic, began with gouges in the driveway for about 20 feet, then a turn to 010 degrees, and off the driveway for another 30 feet, to the main wreckage. The nose of the airplane came to rest heading about 230 degrees magnetic.

Some of the gouges in the driveway were consistent with progressive propeller strikes.

The airplane came to rest in several pieces, with the fuselage twisted behind the main wing spar. The front part of the fuselage came to rest on its right side, and the aft portion came to rest upside down. The left wing was detached from the fuselage, while the right wing remained attached.

The tail section, aft of the pressure bulkhead, came to rest on the other side of the driveway.

The underside of the fuselage, forward of the main wing spar, exhibited upward crushing, at an angle consistent with about 15 degrees nose-down, and 10 degrees left-wing-down attitude at the time of impact.

The forward portion of the left wingtip exhibited impact damage, consistent with a gouge in the ground next to the driveway, and in line with the direction of travel.

There was no evidence of fire.

All flight control surfaces were accounted for at the scene. Flight control continuity was confirmed to the wings, and cables to the rudder and elevators exhibited overload, "broomstraw" breaks.

Visual flap examination, and flap lever and worm drive positions revealed that the flaps were up. Inspection of the landing gear and landing gear handle revealed that they had been down.

The position of the inertial (ice) separator actuator corresponded to the inertial separator outlet door being open.

The instrument panel was destroyed, and most of the instruments were either destroyed, unreliable, or digital. The deicing panel was recovered, and bent in the middle; however, switch positions "as found" were: Probes: ON; Props: ON; Boots: 3 MIN; Left Windshield: LIGHT; Right Windshield: LIGHT.

The propeller was separated from the engine. One blade was separated from the hub, and exhibited approximately 1-inch-deep, mid-span gouges in both leading and trailing edges. The leading edge gouge was about 7 inches in length, while the trailing edge gouge was about 6 inches in length. A second blade was bent at a 90-degree angle, and exhibited a 90-degree bend, aft. The third and fourth blades exhibited progressively less bending. All blades exhibited varying degrees of chordwise scratching.

The engine was still attached to the airframe nacelle, and was on its right side. The forward cowlings were separated by impact, and the condition of the aft part of the engine could not be ascertained due to encasement by compacted airframe components.

The forward housing of the reduction gearbox was fractured axially. The reduction gearbox chip detector boss was fractured, and the chip detector not recovered.

The engine exhausts exhibited malleable bending, and there were no pock marks or dimples noted in the stacks.

MEDICAL AND PATHOLOGICAL INFORMATION

On March 27, 2005, an autopsy was conducted on the pilot at Mount Nittany Medial Center, State College, Pennsylvania, with blunt force trauma listed as the cause of death. Toxicological testing was subsequently performed at the FAA Bioaeronautical Sciences Research Laboratory, Oklahoma City, Oklahoma, with no drugs and no carbon monoxide

detected.

TESTS AND RESEARCH

- Recorders -

There was no cockpit voice recorder or flight data recorder installed on the airplane, nor were there any requirements that they be installed.

The following four items were recovered from the accident scene and forwarded to the Safety Board Recorders Laboratory. Laboratory examination results included:

- Hand-held GPS Unit -

The hand-held GPS unit exhibited impact damage, and the case was compromised. The unit was forwarded to the manufacturer, where several internal components were replaced. Upon activation, the unit displayed "all stored data was lost."

- Engine Trend Monitor -

The engine trend recorder was subsequently forwarded to the manufacturer for download. According to the manufacturer's director of engineering, the trend recorder in the accident airplane was a second-generation unit, and the latest version would have had a much larger memory that would have provided the last 30 minutes of information prior to power termination.

The accident recorder did not exhibit internal damage, and the unit was powered for data retrieval. The memory was 100 percent full. Engine recording samples commenced Jan 20, 2003, and ended May 01, 2003. During that period, engine operation and the associated trends appeared normal. There were no exceedances recorded during that period. There were also two events recorded on February 06, 2005, indicating a hot start.

In the installed unit, the data storage requirement for engine run and trend was larger than the event storage requirement. The unit therefore would have had enough capacity to store the later hot start events but not enough capacity for the more-current engine run or trend information. In addition, due to the data storage limitation, there was a requirement for a trend review every 2 days. There was a flashing lamp crew alert when the memory was 85 percent full. Once the memory reached 100 percent, the alert lamp would have remained solid.

- Attitude Heading Reference System (AHRS) -

The unit was extensively damaged. The Safety Board Recorders Laboratory was able to download historical information from the central processing unit board, which was then forwarded to the manufacturer for review. According to a manufacturer's representative, there

was one BIT entry (Heading Synchro 1 Fail) stored about 125 hours before the accident, "classified as non-critical."

- Flap Control Unit -

Upon disassembly, it was found that every socketed microchip had been ejected from its circuit. According to the manufacturer, the only data potentially recoverable would have been error codes relating to the operation of the unit itself.

According to a Recorders Laboratory Engineer, the nature of the data and the low likelihood of data survival precluded further flap control data recovery.

- Light Bulb Examination -

The following four items were recovered and forwarded to the Safety Board Materials Laboratory. Laboratory examination results included:

- Central Advisory and Warning System (CAWS) -

The CAWS annunciator panel had 42 lighted advisories, each with two light bulbs. Both bulbs had stretched filaments within the DE ICE BOOTS, WSHLD HEAT, INERT SEP, PROP DE ICE, PROBES DE ICE, and PUSHER ICE MODE advisories.

- Mode Controller -

The Mode Controller was also forwarded to the Material Laboratory for examination. Ten of the 16 bulbs within the mode controller had broken filaments, and none of the filaments had obvious signs of stretching.

- Lighted Advisories -

Both the Master Caution and Master Warning advisories had positions for two bulbs. Both of the bulbs in the Master Caution advisory had broken but unstretched filaments. The Master Warning advisory had one bulb with a broken, but unstretched filament, while the other bulb position was empty.

- GPS Select Mode and GPS/OBS Advisories -

The two bulbs in the GPS Select Mode Advisory under HDG-1 had stretched filaments, one of which was also broken. The two bulbs in the GPS/OBS advisory under APR also had stretched filaments, one of which was also broken.

- Engine Examination -

The engine was forwarded to the manufacturer, and examined, on May 24-25, 2005, under the direction of the Transportation Safety Board of Canada. According to the manufacturer's summary of findings, "the engine displayed moderate impact damage. Circumferential rubbing and machining were displayed by the compressor turbine, the 1st stage power turbine vane ring, the 1st stage power turbine, the 2nd stage power turbine vane ring, and the second stage power turbine due to their making axial contact with their adjacent components under impact loads and external housing deformation." In addition, "the reduction gearbox propeller shaft coupling web was fractured in torsion due to power absorbed during the impact."

The engine also "displayed no indications of any pre-impact anomalies or distress that would have precluded normal engine operation prior to impact," and "contact signatures to it's internal components [were] characteristic of the engine developing significant power at the time of impact."

- Radar Study -

The Safety Board also performed a radar study, which included primary and secondary radar return information, transponder altitude information, and selected voice communications. The performance study provided an estimate of performance trends, but also noted the uncertainties associated with the imprecise nature of radar data and wind estimates.

According to the study:

At 1344, the controller advised the pilot that the airplane was 6 miles northeast of PENUE intersection, maintain 4,000 feet until established, and cleared for the ILS approach. At the time, the airplane's altitude was about 6,200 feet, and the airplane was left of the localizer course, on an intercept heading.

At 1345:25, the pilot reported "getting established now," and the controller advised, "you can go to advisory frequency," which the pilot acknowledged. At the time, the airplane was on the localizer course, about 9 nautical miles from the runway, and approximately 1 1/2 dots above glide slope.

The airplane continued to descend, about 1 1/2 dots above glide slope, until it leveled off, approximately 3,800 feet, then briefly climbed back to 4,000 feet, about 5.5 nm from the runway.

The airplane then descended to about 3,000 feet, about 3.8 nm from the runway, but was still in excess of 2 dots above the glideslope.

The airplane then climbed to 3,465 feet, about 3.6 miles from the runway, almost over the accident site. The last radar contact was at 1348:45.

Additional results included: The airplane's airspeed decreased from approximately 150 to 100

knots during the approach, and during the final phase of flight, the airplane reached a decent rate of approximately 2,100 feet per minute, then 30 seconds later, just before the loss of radar contact, a climb rate of approximately 2,500 feet per minute.

ADDTIONAL INFORMATION

- Manufacturer Review of Light Bulb Information -

According to a representative of the airplane manufacturer:

- CAWS Annunciator Panel -

The findings on the CAWS annunciator panel were consistent with a properly configured aircraft for flight in icing conditions. There were no indications of a malfunction of any de-ice or anti ice system, as the AOA DE ICE and DE ICE cautions were not illuminated, and the PUSHER ICE MODE was illuminated.

- Master Warning and Caution -

"It is not conclusive whether a Warning or Caution had occurred during the last phase of flight. It is possible that one had occurred, and the pilot had pushed the annunciator to reset it. However, based on the experience of our company test and instructor pilots, a pilot in a real emergency stress situation would tend to leave the annunciator on and address the problem first, before resetting it. In their opinion, it is more likely than not that there was no Master Warning or Caution indication."

- Mode Controller -

"The findings of the Mode Controller examination indicate that the pilot had disengaged the autopilot by pressing the red A/P disconnect switch on the control yoke. This would cause all lights on the mode controller to go off, and...that the last portion of the flight was intentionally flown by hand. If the stick shaker or a gust (> 1.6 G or < 0.3 G) disengages the A/P, then the Mode Controller would go dark (all annunciators extinguished), as well. However, the aural caution would sound (single chime), the Master Caution annunciator would illuminate, and the A/P DISENG caption would [illuminate] on the CAWS panel. Standard operating procedure is to deactivate the A/P, Yaw Damper and Flight Director with the red A/P disengage switch at 200 feet (or decision height) when the runway is visual. But up to that point an ILS approach should be flown with autopilot."

- GPS Select Mode and GPS/OBS Advisories -

"The stretched filaments in the GPS/OBS annunciator indicate that the pilot was using the GPS OBS option to depict the approach centerline for better spatial orientation. This is common practice when setting up for an ILS approach. However, when finally lining up on the localizer,

the NAV source on the EFIS controller must be switched to ILS so that the autopilot now uses the localizer/glideslope signal instead of GPS data....In addition, the Mode Controller must be switched from NAV to Approach."

- Wreckage Release -

On March 29, 2005, the wreckage was moved to a storage facility in Clayton, Delaware. The wreckage was released on August 11, 2005.

Pilot Information

Certificate:	Private	**Age:**	51,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3	**Last FAA Medical Exam:**	January 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	1645 hours (Total, all aircraft), 173 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Pilatus	**Registration:**	N770G
Model/Series:	PC-12/45	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	299
Landing Gear Type:	Retractable - Tricycle	**Seats:**	8
Date/Type of Last Inspection:	December 1, 2004 100 hour	**Certified Max Gross Wt.:**	9921 lbs
Time Since Last Inspection:		**Engines:**	1 Turbo prop
Airframe Total Time:	1523 Hrs as of last inspection	**Engine Manufacturer:**	Pratt & Whitney Canada
ELT:	Installed	**Engine Model/Series:**	PT-6A-67B
Registered Owner:	J2W Aviation, LLC	**Rated Power:**	1200 Horsepower
Operator:	Jeffrey M. Jacober	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	UNV,1239 ft msl	**Distance from Accident Site:**	3 Nautical Miles
Observation Time:	14:00 Local	**Direction from Accident Site:**	250°
Lowest Cloud Condition:		**Visibility**	10 miles
Lowest Ceiling:	Overcast / 1700 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	130°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.1 inches Hg	**Temperature/Dew Point:**	4°C / 0°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Naples, FL (APF)	**Type of Flight Plan Filed:**	IFR
Destination:	State College, PA (UNV)	**Type of Clearance:**	IFR
Departure Time:	09:53 Local	**Type of Airspace:**	

Airport Information

Airport:	University Park Airport UNV	**Runway Surface Type:**	Asphalt
Airport Elevation:	1239 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	24	**IFR Approach:**	ILS
Runway Length/Width:	6701 ft / 150 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	5 Fatal	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	6 Fatal	**Latitude, Longitude:**	40.878887,-77.777221

Administrative Information

Investigator In Charge (IIC):	Cox, Paul
Additional Participating Persons:	Charles Martin; FAA/FSDO; Harrisburg, PA Elaine Summers; Acc Rep, TSB Canada; Ottawa, Canada Thomas Berthe; Pratt and Whitney Canada; Montreal, Canada Christian Gerber; Acc Rep, Swiss AAIB; Bern, Switzerland Markus Kohler; Pilatus Aircraft Company; Stans, Switzerland
Original Publish Date:	March 26, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61202