National Transportation Safety Board
Aviation Accident Final Report

Location:	TAMPA, FL	**Accident Number:**	MIA99FA095
Date & Time:	02/27/1999, 1010 EST	**Registration:**	N65860
Aircraft:	Beech AT11/18	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

Witnesses saw the airplane depart the airport to the south, turn left at an altitude of about 200 feet above the ground (agl), fly downwind to the departure runway, climb to an altitude of about 800 to 1,000 feet, and then turn right. A witness, who was operating a crane near the crash site said, he saw the airplane approaching from the south heading towards the north, turn to the right (east), and flew directly over him. He told police officers that he could see both propellers 'spinning,' and could 'actually see the pilot flying the plane.' The witness said, '...[the] motor sounded fine...[and the airplane] took a sharp downward fall, hit the road and bounced in the air, then fire started....' Other witnesses said they saw the angle of bank increase, the airplane descend rapidly, impact on a four-lane hard surface road right wing first, strike a wooden power pole, burst into flames, and come to rest in marshy area on the eastside of the road. Examination of the airframe, engine and propeller revealed no discrepancies.

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 control of the airplane resulting in an inadvertent stall at too low an altitude to allow for recovery.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: DESCENT - UNCONTROLLED

Findings
1. (C) AIRCRAFT CONTROL - NOT OBTAINED/MAINTAINED - PILOT IN COMMAND
2. (C) STALL - INADVERTENT - PILOT IN COMMAND

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

Findings
3. TERRAIN CONDITION - ROADWAY/HIGHWAY

Factual Information

HISTORY OF FLIGHT

On February 27, 1999, about 1010 eastern standard time, a Beech AT11/18, N65860, registered to a private individual, crashed shortly after takeoff from Peter O'Knight Airport, Tampa, Florida, while on a Title 14 CFR Part 91 personal flight. Visual meteorological conditions were reported, and no flight plan was filed. The airplane was destroyed. The commercial-rated pilot-in-command, and a private-rated pilot/passenger were fatally injured. The flight was originating at the time, and was en route to Lakeland, Florida.

Witnesses saw the airplane depart the airport to the south, turn left at an altitude of about 200 feet above the ground (agl), fly downwind to the departure runway, climb to an altitude of about 800 to 1,000 feet, and then turn right. The witnesses saw the angle of bank increase, the airplane descend rapidly, impact a four-lane hard surface road, with the right wing and right engine. The airplane's nose struck the highway center median, the left wing struck a wooden power pole and lines, burst into flames and came to rest in marshy area on the eastside of the road.

A witness, who was operating a crane near the crash site said, he saw the airplane approaching from the south heading toward the north, turn to the right (east), and flew directly over him. He told police officers that he could see both propellers "spinning," and could "actually see the pilot flying the plane." He said the pilot was wearing a pair of sunglasses. The witness said, "...[the] motor sounded fine...[and the airplane] took a sharp downward fall, hit the road and bounced in the air, then fire started...."

The accident occurred during the hours of daylight approximately 27 degrees, 55 minutes north, and 082 degrees, 25 minutes west.

PERSONNEL INFORMATION

Information on the pilot is contained in this report on page 3, under First Pilot Information. The pilot's personal flight log book was never found, and his current flight times were not known.

METEOROLOGICAL INFORMATION

Meteorological information is contained in this report on page 3, under Weather Information.

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies were performed on the pilot and the right seat occupant, on February 27, 1999, at the Hillsboro County Medical Examiner's Office, Tampa, Florida, by Dr. Julia V. Martin. According to the Medical Examiner's report the cause of death for the pilot was "...Carbon Monoxide Poisoning and Thermal Burns."

According to the Medical Examiner's report the cause of death for the right seat occupant was "...Neurogenic Shock due to Cerebral Lacerations, Subdural Hematoma and Spinal cord Contusions and Basilar Skull and Cervical Vertebral Fracture due to Blunt Impact to Head and Neck."

Toxicological tests were conducted at the Federal Aviation Administration, Research Laboratory, Oklahoma City, Oklahoma, and revealed, "No ethanol or drugs detected in Blood."

The pilot showed, "...47 per cent CARBON MONOXIDE detected in Blood...2.79 (ug/ml CYANIDE detected in Blood." The passenger showed, "...54 per cent CARBON MONOXIDE detected in Blood...2.95 (ug/ml) CYANIDE detected in Blood." The toxicology report was reviewed by the NTSB's Medical Officer. According to the medical officer, the toxicology report notes levels of cyanide and carboxyhemoglobin that are "consistent with death due to exposure" to these substances. In addition, it is not possible to determine from the postmortem information, whether the fire that caused the thermal burns to the pilot, may have begun before the crash. In a fully developed fire, "it would not be unusual for these carbon monoxide and cyanide levels to be reached within a very short period of time."

WRECKAGE INFORMATION

The airplane impacted, highway 41, a north/south four-lane hard surface road. The impact site was located on a heading of 056 degrees from the departure airport, at a distance of about 1.6 nautical miles. The right wing, engine and propeller impacted the westerly lanes of the road surface, and some gouge marks were found in the concrete pavement. The gouge marks were oriented on a heading of 110 degrees. The airplane continued on a general heading of 110 degrees over the grass highway median, that was raised about 8 inches off the road bed, impacted the road surface again on the east side, impacted a utility pole, a chain link fence, and came to rest in marshy area about 40 yards southeast of the of the utility pole, and about 10 yards east of the road surface, with the nose of the airplane heading in a northeasterly direction.

After the airplane struck the utility pole the outboard 6 feet of the left wing separated and came to rest about 10 feet east of the pole, in the marshy area. The complete tail of the airplane separated from the airframe and was wrapped around the pole at the mid section of the elevator. The right rudder and the mid portion of the elevator was still attached, but had broken forward of the pole. The left engine separated when the wing struck the pole. The engine was found about 50 yards southeast of the pole, and about 10 yards southeast of the main wreckage.

The right wing remained attached to the airframe. The outboard section, and wing tip were found bent upward. The wing displayed scratch marks from the road surface.

The airplane was removed from the crash site and taken to Hector's Towing and Storage, 2802 North Florida Avenue, Tampa, Florida, for further examination. Examination of the airframe revealed that the landing gear and flaps were found in the "UP" position.

Control continuity was established to all flight controls except the right (co-pilot) rudder cables , which were found separated. The rudder cables were removed from the airframe for further examination.

The examination of the fuel selector revealed that the right main tanks had been selected. Examination of the fuel tanks revealed that they were breached during the impact sequence. Examination of the airplane's four fuel tanks revealed that they were breached, but the right tank still contained a half tank of blue fuel. The fuel was tested with water finding paste, and no water was found. No fuel was found in any of the other tanks.

Both engines had separated from the airframe. The left engine had separated after impact with the utility pole and was the furthest piece of wreckage found from the initial impact point. The right engine was found about 5 feet aft of the right wing.

Both propellers remained attached to their respective engine flange. Examination of the left propeller revealed that both blades had remained in the hub. Both blades were found bent about 90 degrees, 14 inches outboard of the hub. Examination of the right propeller revealed that both blades had remained in the hub, and displayed torsional twisting, "S" bending, and chordwise scratches. Both blades had remained secure in the propeller hub.

TEST AND RESEARCH

The two right (copilots) rudder cables were removed from the airplane and sent to the NTSB Materials Laboratory, Washington, D.C. for fracture analysis on the cable fracture surfaces. Both cables were covered with a black deposit consistent with soot. The cables were separated at the ends. Each cable was manufactured from several wire strands. For identification purposes the cables were marked with arrows numbered 1 and 2. The cable marked No. 1, measured about 12 inches and the cable marked No. 2, measured about 16 inches. Both cables received ultrasonic cleaning in detergent.

Cable No.1 was examined with a stereo microscope and cable No. 2 was examined with a scanning electron microscope (SEM). Examination of both cables revealed that the wires contained features typical of overstress separations, and no pre-existing damage was noted on either cable. No wear damage was noted on the cables. The individual wires that made-up cable No. 2 contained "round-groove impression marks" that were oriented perpendicular to the wires. Longitudinal near-flat impression marks were found on the wires of cable No. 2, which were consistent with the individual wires tightening-up against each other, while the cable is in tension, and bending around an object. (See the NTSB Materials Laboratory Factual Report attached to this report.)

Examination of both engines was performed under the supervision of the NTSB, at the facilities of Dumont Aircraft Engines, Inc., Avon Park, Florida, on April 2, 1999. Both engines were completely torn down and no discrepancies were found.

Examination of both propellers was performed under the supervision of the NTSB, at the facilities of Aviation Propellers, Inc., Opa Locka, Florida, on April 4, 1999. Both propellers were completely torn down and no discrepancies were found. It was determined that both propellers were not feathered.

ADDITIONAL INFORMATION

The airplane was released to Mr. John P. Silberman, the owner, on February 29,1999. The engines were released to Robert Dumont for shipment to the owner on April 2, 1999.

Pilot Information

Certificate:	Flight Instructor; Commercial; Flight Engineer	**Age:**	67, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	**Last FAA Medical Exam:**	07/03/1997
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	15000 hours (Total, all aircraft), 2000 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N65860
Model/Series:	AT11/18 AT11/18	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	43-1452
Landing Gear Type:	Retractable - Tailwheel	**Seats:**	6
Date/Type of Last Inspection:	01/01/1999, 100 Hour	**Certified Max Gross Wt.:**	7850 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:	13300 Hours	**Engine Manufacturer:**	P&W
ELT:	Installed, not activated	**Engine Model/Series:**	R-985-14B
Registered Owner:	JOHN P. SILBERMAN	**Rated Power:**	450 hp
Operator:	JOHN P. SILBERMAN	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	TPA, 27 ft msl	**Distance from Accident Site:**	2 Nautical Miles
Observation Time:	1010 EST	**Direction from Accident Site:**	236°
Lowest Cloud Condition:	Clear / 0 ft agl	**Visibility**	6 Miles
Lowest Ceiling:	None / 0 ft agl	**Visibility (RVR):**	0 ft
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	170°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	20°C / 10°C
Precipitation and Obscuration:			
Departure Point:	(TPF)	**Type of Flight Plan Filed:**	None
Destination:	LAKLAND, FL (LAL)	**Type of Clearance:**	None
Departure Time:	0000	**Type of Airspace:**	

Airport Information

Airport:	PETER O'KNIGHT (TPF)	**Runway Surface Type:**	Asphalt
Airport Elevation:	10 ft	**Runway Surface Condition:**	Dry
Runway Used:	3	**IFR Approach:**	None
Runway Length/Width:	3400 ft / 100 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	On-Ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	ALAN J YURMAN	**Report Date:**	12/04/2000
Additional Participating Persons:	LINDA NEVIN; TAMPA, FL PAUL YOOS; WICHITA, KS		
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/.		