



# Aviation Investigation Final Report

<b>Location:</b>	Stone Mountain, Georgia	<b>Accident Number:</b>	ATL03FA140
<b>Date &amp; Time:</b>	September 16, 2003, 19:58 Local	<b>Registration:</b>	N1980K
<b>Aircraft:</b>	Beechcraft A36	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

Witnesses stated that they observed the airplane circling the mountain just prior to the accident. Radar data confirmed what the witnesses saw and that the airplane made five complete counterclockwise circles of the mountain. On the sixth circuit farther out from the mountain than the preceding five circuits it turned in and headed straight toward the mountain. Radar contact was lost at 1958 while the airplane was in a rapid descent at a ground speed of 179 knots. There was no evidence of a mechanical malfunction with the airplane, or weather related factors. The flight profile of sudden rapid descent and pitch-up could not have occurred without pilot input. The pilot had consumed alcohol in the hours before the accident according to a witness. It was unusual behavior for the pilot to be flying so soon after drinking, given statements by several witnesses that he was careful to never fly within at least 12 hours of alcohol consumption. Additionally, it was found that the pilot had threatened suicide in the past on more than one occasion under similar circumstances.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's intentional flight into the ground for the purpose of suicide while impaired by alcohol.

## Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT

### Findings

1. TERRAIN CONDITION - MOUNTAINOUS/HILLY
2. (C) AIRCRAFT HANDLING - INTENTIONAL - PILOT IN COMMAND
3. (C) SUICIDE - INTENTIONAL - PILOT IN COMMAND
4. (F) IMPAIRMENT(ALCOHOL) - PILOT IN COMMAND

## Factual Information

### HISTORY OF FLIGHT

On September 16, 2003, at 1958 eastern daylight time, a Beech A36, N1980K, registered to and operated by the commercial pilot, collided with the south side of Stone Mountain, and burst into flames in Stone Mountain, Georgia. The flight was operated under the provisions of Title 14 CFR Part 91, and visual flight rules. Visual meteorological conditions prevailed and no flight plan was filed for the local flight. The pilot received fatal injuries and the airplane was substantially damaged. The flight originated from Peachtree-Dekalb airport, Chamblee, Georgia at 1925.

Witnesses stated that they observed the airplane circling the mountain just prior to the accident. They stated that they saw the airplane flying directly towards the mountain at just above the treetops, then they heard an explosion and observed a fireball and black smoke. Several witnesses stated that they immediately telephoned the 911 operators and or tried to access the accident site.

Radar data confirmed what the witnesses reported, and that the airplane made five complete counterclockwise circles of the mountain. On the sixth circuit farther out from the mountain than the preceding five circuits it turned in and headed straight toward the mountain. Radar contact was lost at 1958 while the airplane was in a rapid descent at a ground speed of 179 knots.

### PERSONNEL INFORMATION

A review of information on file with the FAA Airman's Certification Division, Oklahoma City, Oklahoma, revealed the pilot held a commercial pilot certificate, with ratings for airplane single engine land, and instrument airplane. A review of records on file with the FAA aero medical records revealed the pilot held a second-class medical certificate issued on May 14, 2002, with a restriction that he must wear corrective lenses. The pilot reported on his application for the medical certificate that he had accumulated 5,700 total flight hours. The pilot's flight logbook was not recovered for examination.

### AIRCRAFT INFORMATION

A review of the aircraft maintenance records revealed that an annual inspection was completed on October 25, 2002, at a total time of 4,042.93 hours. At the time of the accident the airplane had accumulated 55.18 hours since the annual inspection..

### METEOROLOGICAL INFORMATION

The nearest weather reporting facility at the time of the accident was the Atlanta Hartsfield International Airport in Atlanta, Georgia. The 2053 surface weather observation was: Sky Clear, Visibility 10 statute miles, temperature 22-degrees Celsius, dewpoint temperature 17-degrees Celsius, wind 090-degrees at 8 knots, and altimeter 30.08.

## WRECKAGE AND IMPACT INFORMATION

Examination of the accident site found that the airplane collided with the south side of Stone Mountain on a heading of 347 degrees magnetic. The airplane collided with the mountain in a nose up attitude and debris was scattered up the slope of the mountain for 980 feet.

The impact elevation was at 1,062 feet MSL. Examination of the impact signatures on the mountainside and the wings, found that the airplane impacted flat or nose-up with the 40-degree upslope of the mountain. Wing impact marks radiated out to the left and right of the centerline of the initial impact point. Four slash marks were found in the mountain, slightly right of the crash track centerline. Wreckage debris was scattered along the whole crash path. The empennage had been moved from a lower point and placed at the 219-foot mark from initial impact by local authorities. The rudder was found separated from the empennage. The cabin and cockpit area was located on a track of 351-degrees magnetic, 557 feet from the initial impact at the 1350-foot elevation. The cabin and cockpit area was severely burned and broken up. Due to the fragmentation of the airplane flight control cable continuity could not be confirmed; however, parts of the flight control linkage and flight control cables that were identified and examined exhibited separation signatures consistent with overload failures. Several cables were cut to facilitate removal of the wreckage from the mountainside. The wreckage covered a horizontal distance of approximately 980 feet, and a vertical distance of approximately 392 feet.

Vertically, 180 feet, up hill from the initial impact area was the empennage. The empennage had separated from the airplane at the intersection of the dorsal faring and the vertical stabilizer. The horizontal stabilizers were intact with their respective elevators attached. The elevator trim was found to be in a five-degree tab-up position. The vertical stabilizer was intact, except that the rudder had separated from it, and was found further uphill. The empennage was oily and sooty about its entire surface, and no streaking was evident in the soot.

The main wreckage, which consisted of both wings and a majority of the fuselage, was found vertically uphill an additional 20 feet from the empennage. The right flap had separated from the right wing and was found mostly intact. The left wing flap was damaged by fire, and was found in the vicinity of the left wing. Both wings were damaged by fire inboard of the ailerons. The ailerons had remained attached to the wings. Impact forces, and the post impact fire had damaged the fuselage, cabin, and cockpit.

The propeller fragmented, and was found in the vicinity of the initial impact area. Its hub was

in multiple pieces, as was one propeller blade. The other two blades, free of the hub, were complete with damage to their tips and leading edges.

The engine was found furthest up the hill. It had been damaged by impact, and was missing one of its cylinders; its oil pan, and all of its accessories. The propeller flange had separated from the engine. The flange was found alone at about the same height on the hill as the engine, but approximately 100 feet to the right along the face of the hill.

Various pieces of the airplane were strewn about the hill along the debris path. Pieces of landing gear and other airplane structures were found in the vicinity of the main wreckage, but to the left and right of the accident path.

## MEDICAL AND PATHOLOGICAL INFORMATION

The Dekalb County Office of the Medical Examiner, Decatur, Georgia, conducted a postmortem examination of the pilot on September 17, 2003. The cause of death was reported as Multiple Blunt Impact Fragmentary Injuries. The Forensic Toxicology Research Section, Federal Aviation Administration, Oklahoma City, Oklahoma performed postmortem toxicology of the specimens for the pilot. Carbon Monoxide and cyanide testing was not performed. 79(mg/dl, mg/hg) Ethanol detected in brain, 101(mg/dl, mg/hg) Ethanol detected in muscle, and 6(mg/dl, mg/hg) Acetaldehyde detected in brain.

## ADDITIONAL INFORMATION

### Human Performance Investigation

The Human Performance investigator conducted telephone interviews of persons familiar with the pilot and his activities prior to the accident and reviewed relevant medical and background records.

#### Background of the pilot

The pilot, age 69, was an accountant and experienced pilot who owned the accident airplane for both business and recreational flying. He was described as an excellent pilot, who flew at least once per week to a total of about 100 to 150 hours per year. One regular pleasure flight described by several associates was to circle Stone Mountain, a nearby landmark. Several people indicated that, as a strict personal policy, the pilot did not drink alcohol for at least 12 hours before flying. He kept the airplane perfectly maintained.

One witness, a woman who claimed to have been a friend of the pilot several years before, stated that the accident pilot threatened on multiple occasions when she knew him to commit suicide by flying into Stone Mountain. He once telephoned her during that period, sounding drunk, and stated that he had just taxied out to the end of the runway intending to take off and fly into Stone Mountain but that he had lost courage.

According to a family representative, the pilot did not have any major changes in his financial or personal situations in the previous year. His activities and sleep were described as normal in the days before the accident.

According to his personal secretary, the pilot spent a routine workday at his accounting office before the accident (Tuesday 9/16/03). Between 1300 to 1500, the pilot and secretary ate lunch together at a restaurant during which the pilot consumed several gin martinis. The secretary last saw the pilot when she left work about 1620, and said that he seemed fine that day and that she did not observe anything unusual in his behavior.

The pilot's wife stated that she last saw her husband around 1900 that evening: He got home late for dinner and it appeared that something was bothering him, but he did not say what. He wasn't home more than 10-15 minutes. She went upstairs and he left without saying anything.

FAA records indicate no previous accidents or violations. A search of the National Driver Register found no history of driver's license suspensions or revocations for the pilot.

#### Medical information

According to FAA records, the pilot held a valid Second Class Pilot Medical Certificate dated 5/14/02 with the limitation that holder shall wear lenses that correct for near and distant vision while exercising the privileges of his airman's certificate. The pilot's aviation medical examiner (who was also his personal physician) indicated that the pilot was being treated for elevated blood pressure. The physician stated that the accident pilot visited very often for medical exams but, surprisingly, stopped visiting in the months before the accident. He said that the pilot always seemed somewhat stressed.

Toxicology testing, conducted by the Federal Aviation Administration's (FAA) Civil Aeromedical Institute (CAMI) on tissues specimens obtained posthumously from the pilot were positive for ethanol and negative on a large drug screen that included major drugs of abuse. The test report indicated no observed putrefaction in the tested samples.

Relatives and acquaintances described the pilot as having excellent health and, according to a family representative; the pilot did not have any major changes in his health in the past year.

The wreckage of N1980K, and all aircraft records, was released to the USAIG's Assistant Vice President of Claims on November 12, 2004.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	69,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	May 14, 2002
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	July 1, 2002
<b>Flight Time:</b>	5319 hours (Total, all aircraft), 4858 hours (Total, this make and model), 5319 hours (Pilot In Command, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beechcraft	<b>Registration:</b>	N1980K
<b>Model/Series:</b>	A36	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	E1758
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	October 25, 2002 Annual	<b>Certified Max Gross Wt.:</b>	3600 lbs
<b>Time Since Last Inspection:</b>	55.18 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4042.93 Hrs at time of accident	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-520-B5F
<b>Registered Owner:</b>	Phillip Daniel Rogers	<b>Rated Power:</b>	285 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Dusk
<b>Observation Facility, Elevation:</b>	ATL,1026 ft msl	<b>Distance from Accident Site:</b>	15 Nautical Miles
<b>Observation Time:</b>	20:53 Local	<b>Direction from Accident Site:</b>	45°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	8 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	90°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.07 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 17°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Chamblee, GA (PDK )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Chamblee, GA (PDK )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	19:25 Local	<b>Type of Airspace:</b>	Class E

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	On-ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	On-ground
<b>Total Injuries:</b>	1 Fatal	<b>Latitude, Longitude:</b>	33.801666,-84.135276



## Administrative Information

**Investigator In Charge (IIC):** Wilson, Ralph

**Additional Participating Persons:** Robert L West; Atlanta FSDO; College Park, GA  
R.S. Scott Boyle; Teledyne Continental Motors, Inc.; Arvada, CO  
Brian D Cassidy; Beechcraft; Wichita, KS

**Original Publish Date:** September 13, 2005

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=57962>

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