Aviation Investigation Final Report

Location:	Harned, Kentucky	**Accident Number:**	NYC03FA136
Date & Time:	June 26, 2003, 20:30 Local	**Registration:**	N8953M
Aircraft:	Beech 35-B33	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot and passenger were returning from a vacation, and were 30 miles from their destination airport, when witnesses observed the airplane descending straight down, resembling a "World War II dive bomber airplane." The witnesses reported hearing the engine as if it was "wide open, at full power." They also reported weather at the time of the accident was "clear" and the visibility was "good". Examination of the airplane and engine revealed no mechanical deficiencies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The airplane's in-flight collision with terrain for undetermined reasons.

Findings

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

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings
2. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On June 26, 2003, at 2030 central daylight time, a Beech 35-B33, N8953M, was destroyed when it impacted terrain in Harned, Kentucky. The certificated private pilot and passenger were fatally injured. Visual meteorological conditions prevailed and no flight plan was filed for the flight which originated at the Salina Municipal Airport (SLN), Salina, Kansas, and was destined for the Samuels Field Airport (BRY), Bardstown, Kentucky. The personal flight was conducted under 14 CFR Part 91.

The pilot and passenger flew from Bardstown, Kentucky to Jackson Hole, Wyoming the week prior to the accident, for a vacation. They departed Jackson Hole for the return flight, on June 26, approximately 0930 mountain daylight time, and made fuel stops in Loveland, Colorado, and Salina, Kansas. The airplane was approximately 30 miles from Bardstown when witnesses observed it in a descent.

A witness, who was sitting on his porch when he first observed the airplane, stated that he heard the airplane's engine sounding as if it was "wide open, at full power." He observed the airplane descending toward the ground, stating it was oriented "straight down," and not spinning. The witness stated the weather at the time of the accident was clear and the visibility was good.

Federal Aviation Administration (FAA) inspectors interviewed several witnesses at the scene of the accident. All of the witnesses reported hearing the engine running normally, and noted no abnormalities with the airplane. One witness reported the airplane resembled a "World War II dive bomber airplane."

The accident occurred during the hours of dusk, at 37 degrees, 43.59 minutes north longitude, 86 degrees, 23.47 minutes west latitude.

PERSONNEL INFORMATION

The pilot held a private pilot certificate with ratings for single and multi engine land, and instrument airplane. His most recent FAA third class medical certificate was issued on April 24, 2002, at which time he reported 2,960 hours of total flight experience. The pilot's logbook was not located.

AIRCRAFT INFORMATION

Examination of the airplane and engine logbooks revealed the last annual inspection was

performed on July 17, 2002, with no abnormalities noted. The annual inspection was the last entry recorded in the engine logbook, and only one additional entry was noted in the airframe logbook for an altimeter/transponder check.

METEOROLOGICAL INFORMATION

Weather reported at Owensburg County Airport (OWB), Owensburg, Kentucky, about 43 nautical miles west of the accident site, at 2045, included wind from 320 degrees at 8 knots, 7 miles visibility, scattered clouds at 4,500 feet, broken clouds at 7,500 feet, temperature 70 degrees, dew point missing, and barometric pressure 30.02 inches Hg.

AIR TRAFFIC CONTROL INFORMATION

A review of air traffic control (ATC) information revealed the pilot did not receive a weather briefing or file a flight plan for the flight. Additionally, there was no record of any communication between the airplane and ATC while en route.

WRECKAGE AND IMPACT INFORMATION

The initial impact point was a tree strike at a height about 120 feet above the ground, in a heavily wooded area, at an elevation of 650 feet. Located near the base of the tree strike was the right aileron, and a section of the right wing. An impact crater, 10 feet wide and 2-foot deep was observed 84 feet from the initial tree strike. Wreckage was scattered outward from the impact crater about 49 feet, oriented on an approximate heading of 235 degrees.

Located in the impact crater was one propeller blade, fragments of the propeller hub, and an engine cylinder. The other propeller blade was located near the crater, to the right of the wreckage path. Both blades displayed S-bending, and chordwise scratching. One blade exhibited leading edge gouges near the blade tip.

All of the airplane's major components and flight control surfaces were located at the accident site; however, the airplane was fragmented into numerous pieces by the impact. Flight control continuity could not be confirmed; however, a measurement of the flap actuator revealed the flaps were in the retracted position. Examination of the landing gear actuator revealed the landing gear was also in the retracted position.

The empennage section of the airplane was observed inverted and imbedded in a spilt at the base of a tree, about 115 feet from the initial tree strike. The vertical and horizontal stabilizers remained attached to the empennage, but were severely impact damaged.

The engine came to rest inverted about 133 feet from the initial tree strike. The number 5 and number 6 cylinders had separated from the engine, and the remaining cylinders exhibited severe impact damage. Engine fragments were also observed in the impact crater, and along the wreckage path. Two vacuum pumps located along the wreckage path were disassembled,

and examination of their vanes revealed they were impact damaged.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot by the Office of the Chief Medical Examiner, Louisville, Kentucky.

Toxicological testing was performed by the FAA Toxicology Accident Research Laboratory, Oklahoma City, Oklahoma.

ADDITIONAL INFORMATION

An invoice from a fixed base operator (FBO) at the Jackson Hole Airport (JAC), Jackson Hole, Wyoming revealed that the pilot arrived at Jackson Hole on June 14, 2003 and departed on June 26, approximately 0930 mountain daylight time. The airplane was fueled with 58.7 gallons of 100 LL aviation fuel on June 14, which topped the fuel tanks.

Two further fuel receipts were obtained, for fuel purchases made by the pilot on June 26. One receipt was for 30.4 gallons of 100LL aviation fuel, purchased at the Fort Collins/Loveland Municipal Airport, Loveland, Colorado. The second receipt was for 30.3 gallons of 100LL aviation fuel, purchased at the Salina Municipal Airport, Salina, Kansas. Employees at the Salina Airport thought this purchase was made around 1400 central daylight time.

A straight-line course drawn from the Salina, Kansas to Bardstown, Kentucky was approximately 574 nautical miles long. According to the Beechcraft B33 Owner's Manual, the cruising range for the accident airplane, with 49 gallons of fuel, was 650 miles. With 78 gallons of fuel, the range was 1,140 miles. The accident airplane had a fuel capacity of 78 gallons of useable fuel.

The airplane wreckage was released on June 28, 2003, to a representative of the owners insurance company.

Pilot Information

Certificate:	Private	**Age:**	71,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	
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 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	April 24, 2002
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	2960 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N8953M
Model/Series:	35-B33	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	CD-712
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	July 17, 2002 Annual	**Certified Max Gross Wt.:**	3000 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	4127 Hrs as of last inspection	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	IO-470
Registered Owner:	Jim Staples	**Rated Power:**	225 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Dusk
Observation Facility, Elevation:	OWB,406 ft msl	**Distance from Accident Site:**	43 Nautical Miles
Observation Time:	20:45 Local	**Direction from Accident Site:**	270°
Lowest Cloud Condition:	Scattered / 4500 ft AGL	**Visibility**	7 miles
Lowest Ceiling:	Broken / 7500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	8 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	320°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.02 inches Hg	**Temperature/Dew Point:**	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SALINA, KS (SLN)	**Type of Flight Plan Filed:**	None
Destination:	Bardstown, KY (BRY)	**Type of Clearance:**	None
Departure Time:	14:00 Local	**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	37.733055,-86.396385

Administrative Information

Investigator In Charge (IIC):	Andrews, Jill
Additional Participating Persons:	Bill Fisher; FAA/FSDO; Louisville, KY Eddie Webber; Raytheon Aircraft Company; Wichita, KS Al Butler; Continental Motors; Daphne, AL
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Last Revision Date:	
Investigation Class:	Class
Note:	
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