



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	MONTEAGLE, TN	<b>Accident Number:</b>	ATL00FA019
<b>Date &amp; Time:</b>	01/01/2000, 1302 CST	<b>Registration:</b>	N8821V
<b>Aircraft:</b>	Bellanca BL-17-30A	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

Circumstances of the history of flight are not known. The intended route of flight was not determined, a review of the Federal Aviation Administration Flight service system failed to disclose that the pilot had received a pre-flight weather briefing for the intended flight. The flight was first heard only seconds before the airplane collided with trees. Subsequent to the collision, smoke was sighted in the vicinity of the accident site. Upon arriving at the accident site, rescue personnel noticed that fog and low clouds were about 20 feet above the ground, and the mountain top was obscured. Examination of the engine and airframe failed to disclose a mechanical malfunction or the failure of related component assemblies.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to adequately evaluate weather conditions that resulted in the continuation of visual flight into instrument weather conditions and the subsequent collision with trees.

## Findings

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Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation: CRUISE

### Findings

1. (C) WEATHER CONDITION - LOW CEILING
  2. (C) VFR FLIGHT INTO IMC - CONTINUED - PILOT IN COMMAND
  3. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
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Occurrence #2: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: CRUISE

### Findings

4. OBJECT - TREE(S)

## Factual Information

### HISTORY OF FLIGHT

On January 1, 2000, at 1302 central standard time, a Bellanca BL-17-30A, N8821V, collided with trees and burst into flames in a heavily wooded area near Monteagle, Tennessee. The personal flight was operated by the pilot under the provisions of Title 14 CFR Part 91 with no flight plan filed. Instrument weather conditions prevailed at the time of the accident. The airplane was destroyed; the private pilot and his passenger were fatally injured. According to the initial report from local law enforcement authorities, the flight departed Asheville, North Carolina, at an undetermined time, and the exact route of flight was not known.

Reportedly, the pilot and his passenger spent the evening prior to the accident at a local hotel in Asheville, North Carolina. Circumstances of the history of flight are also not known. The flight departed Asheville, North Carolina, at an undetermined time on the morning of the accident. The intended route of flight was not determined, a review of the Federal Aviation Administration Flight service system failed to disclose that the pilot had received a pre-flight weather briefing for the intended flight.

The flight was first heard only seconds before the airplane collided with trees. According to a witness near the accident site, he heard the airplane overhead followed by a high revving engine sound and the sound of the airplane colliding with trees. Another witness reported hearing an explosion during the sequence of events. Subsequent to the collision, smoke was sighted in the vicinity of the accident site.

Within minutes of the collision, emergency response personnel from surrounding counties were on site. According to Monteagle Chief of Police, upon arriving at the accident site, he noticed that fog and low clouds were about 20 feet above the ground, and the mountain top was obscured.

### PERSONNEL INFORMATION

The pilot held a private pilot certificate with airplane single-engine land, and instrument ratings. A review of pilot information from the Federal Aviation Administration (FAA), his total flight time was 400 hours but the approximately flying time in the Bellanca BL-17-30A was not determined. The pilot held a current third class medical certificate, dated August 10, 1999, valid with no waivers or limitations.

### AIRCRAFT INFORMATION

The four place Bellanca BL-17-30A airplane, N8821V, was owned and operated by the pilot. N8821V was powered by a fuel injected, 300 horse power Continental Motors IO-520-K engine. A review of the airplane maintenance logbooks showed that the last annual inspection was completed on July 28, 1999. The airframe tachometer was not recovered at the accident site, however, according to the airframe maintenance logbook the last entry was recorded on December 24 1999, at 1916.5 hours.

### METEOROLOGICAL INFORMATION

A review of weather data from reporting facilities in the vicinity of the accident site showed the following observations: The Chattanooga 1353 weather observation reported broken clouds at 300 feet with 1.75 miles visibility: the altimeter setting was 30.15 inches of mercury. The winds

were light and variable.

The area forecast for middle Tennessee at the approximate time of the accident called for broken cloud conditions between 2000 and 3000 feet, and visibility under the cloud layer between 3 and 5 miles. Marginal visual flight rule weather conditions were also forecasted for middle Tennessee.

A review of the FAA flight service files failed to show that the pilot had received a preflight or inflight weather briefing.

#### WRECKAGE AND IMPACT INFORMATION

Examination of the accident site disclosed that wreckage debris was scattered over an area approximately 800 feet long and 60 feet wide. Wreckage debris was orientated on a northwesterly magnetic heading. Several freshly broken trees were scattered along the wreckage path. Fire damage was confined to the last third of the wreckage path. The main wreckage, which consisted of the cockpit and center section of the airframe, was heavily fire damaged. Further examination of the airframe disclosed that the airplane rested inverted at the accident site. Several pieces of the airframe including engine cowling were torn from the airplane and were scattered throughout the length of the wreckage path. Other wreckage debris was lodged in trees along the wreckage path.

The engine assembly was located approximately 100 feet northwest of the main wreckage. Examination of the engine assembly revealed that many externally installed components were torn from their normally installed positions. Further examination of the engine showed a large hole on the top and front portions of engine case halves.

The three propeller blades separated from the engine assembly. One propeller blade rested 48 feet northwest of the main wreckage the second and third propeller blades remained attached to the hub assembly and was 39 feet east of the main wreckage. Examination of the propeller blades showed twisting and chordwise scraping on each blade.

The examination of the engine failed to disclose a system malfunction or a component failure. Examination of the remainder of the airframe also failed to disclose a mechanical malfunction or the failure of related component assemblies.

#### MEDICAL AND PATHOLOGICAL INFORMATION

On January 3, 2000, a limited postmortem examination of the pilot was performed by Dr. Charles Harlan at the office of the Forensic Pathology Association in Nashville, Tennessee, The toxicology examinations were performed by the FAA Toxicology and Accident Research Laboratory, Oklahoma City, Oklahoma. The tests were negative for carbon monoxide, cyanide, drugs and alcohol.

#### ADDITIONAL INFORMATION

The airplane wreckage was released on August 30, 2000 to Mr. Kevin Twist, an insurance adjuster, Atlanta, Georgia.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	56, 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 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	08/10/1999
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	400 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Bellanca	<b>Registration:</b>	N8821V
<b>Model/Series:</b>	BL-17-30A BL-17-30A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	30345
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	07/28/1999, Annual	<b>Certified Max Gross Wt.:</b>	3325 lbs
<b>Time Since Last Inspection:</b>	26 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1888 Hours	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-520-K
<b>Registered Owner:</b>	JOHN R. JACKSON	<b>Rated Power:</b>	300 hp
<b>Operator:</b>	JOHN R. JACKSON	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CHA, 682 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	1353 CST	Direction from Accident Site:	300°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	1.75 Miles
Lowest Ceiling:	Broken / 300 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	13° C / 13° C
Precipitation and Obscuration:			
Departure Point:	ASHEVILLE, NC (AVL)	Type of Flight Plan Filed:	None
Destination:	JACKSON, IN	Type of Clearance:	None
Departure Time:	1300 CST	Type of Airspace:	Class G

## 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):	PHILLIP POWELL	Report Date:	04/19/2001
Additional Participating Persons:	HAL CUTLER; NASHVILLE, TN		
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 <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).