Aviation Investigation Final Report

Location:	Lawrenceville, Georgia	**Accident Number:**	ATL07FA030
Date & Time:	December 25, 2006, 20:30 Local	**Registration:**	N62950
Aircraft:	Cessna 414A	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	3 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to Atlanta Air Route Traffic Control Center (ARTCC) personnel, the pilot was given the current weather information before attempting his first instrument approach into Gwinnett County Airport-Briscoe Field (LZU), Lawrenceville, Georgia, which included: winds calm, visibility 1/2-mile in fog, and ceiling 100 feet. The pilot acknowledged the current weather information and elected to continue for the instrument landing system (ILS) runway-25 approach. During the first landing attempt, the pilot reported that he was going to execute a missed approach, but that he saw the airport below and wanted to attempt another approach. The ARTCC controller provided the pilot with radar vectors back to the ILS runway-25 approach and again updated the pilot with current weather conditions. During the second approach the tower controller advised the pilot that he was left of the runway-25 centerline. Shortly after the pilot acknowledged that he was left of the centerline, the tower controller saw a bright "orange glow" off of the left side of the approach end of runway 25. Although the weather conditions were below approach minimums for the runway 25-approach, the pilot elected to attempt the landing. A flight inspection of the ILS was completed on December 26, 2006, and the results of the inspection revealed that the ILS runway-25 approach system was satisfactory. Examination of the airframe, flight control system components, engines and system components revealed no evidence of preimpact mechanical malfunction.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to follow the instrument approach procedure. Contributing to the accident was the pilot's descent below the prescribed decision height altitude.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: APPROACH

Findings
1. OBJECT - TREE(S)
2. (C) IFR PROCEDURE - NOT FOLLOWED - PILOT IN COMMAND
3. (F) DECISION HEIGHT - CONTINUED BELOW - PILOT IN COMMAND

Factual Information

HISTORY OF FIGHT

On December 25, 2006, at 2030 eastern standard time, a Cessna 414A, N62950, registered to ATA of Broward Corporation and operated by a private pilot, collided with trees during an instrument approach into Gwinnett County Airport-Briscoe Field (LZU), Lawrenceville, Georgia. The personal flight was operated under the provisions of Title14 Code of Federal Regulations Part 91, with an instrument flight rules (IFR) flight plan filed. Instrument meteorological conditions prevailed. The airplane was substantially damaged, and the private pilot and two passengers were fatally injured. The flight originated from Palm Beach County Glades Airport, Pahokee, Florida, on December 25, 2006, at 1800.

According to Atlanta Air Route Traffic Control Center (ARTCC) personnel, the pilot was given the current weather information before attempting his first instrument approach into LZU, which included: winds calm, visibility 1/2-mile in fog, and ceiling 100 feet. The pilot acknowledged the weather information and elected to continue for the instrument landing system (ILS) runway-25 approach. The pilot contacted the LZU tower controller and reported that he was inbound on the ILS runway-25 approach. The tower controller cleared him for landing. During the first landing attempt, the pilot reported that he was going to execute a missed approach, but saw the airport and wanted to attempt another approach. The tower controller acknowledged the pilot's request and transferred the pilot over to ARTCC personnel for missed approach instructions. The ARTCC controller provided the pilot with radar vectors back to the ILS runway-25 approach and again updated him with current weather conditions. During the second approach the tower controller advised the pilot that he was left of the runway-25 centerline. Shortly after the pilot acknowledged that he was left of the centerline, the tower controller saw a bright "orange glow" off of the left side of the approach end of runway 25. The tower controller made several attempts to contact the pilot but received no reply. First responders to the accident site confirmed that the wreckage of the airplane was in a construction yard adjacent to runway 25.

PERSONNEL INFORMATION

The pilot, age 44, held a commercial pilot certificate with ratings for airplane single engine land, multi-engine land and instrument airplane issued on April 8, 2005, and a third-class medical certificate issued September 1, 2005 with no limitations. A review of the pilot's logbook revealed that he had accumulated 631.7 total flight hours, of which 406.7 hours were in the Cessna 414. The pilot had logged 20 flight hours, which were flown in the last 90 days before the accident. The pilot's logbook also revealed that he had accumulated 26.4 total flight hours of actual instrument time, 56.3 hours of simulated instrument time, and 142 night flight hours.

AIRCRAFT INFORMATION

The six-seat, low-wing, fixed-gear airplane, serial number (S/N) 414-0086, was manufactured in 1979. It was powered by two Continental TSIO-520-J2 310-horsepower engines and equipped with two McCauley 3AF32C93-NR/82NB-6 constant speed propellers. A review of the maintenance logbook records showed an annual inspection was completed on March 3, 2006, at a recorded tachometer reading of 2,982.3 hours, an airframe total time of 4,313.3 hours. The last maintenance entry (replacement of the auxiliary fuel boost pump) was completed on the airframe on October 13, 2006, with a tachometer time of 3,028.3, and a total airframe time of 4,359.3. The Hobbs meter was found damaged in the wreckage.

METEOROLOGICAL INFORMATION

Night instrument meteorological conditions prevailed in the LZU area at the time of the accident. A review of recorded data from the LZU automated weather observation station, elevation 1,061 feet mean sea level (msl), revealed that at 1945, conditions were; winds calm, visibility 0.5 statute miles with fog, with a vertical visibility of 100 feet.

AIRPORT INFORMATION

The Gwinnett County Airport is located approximately 2 nautical miles northeast of Lawrenceville, Georgia. The airport has a single asphalt runway (7/25), that is 6,000 feet long and 100 feet wide at an elevation of 1,061 feet msl. The runway 25 obstructions consist of 50-foot trees, 200 feet from the runway threshold. There are trees that are estimated to be 30 to 50 feet high, 500 feet left, and 418 feet to the right of the runway threshold. The runway is equipped with a 1,400-foot medium intensity approach lighting system, with runway alignment indicator lights.

Review of the ILS Runway 25 approach plate for LZU revealed that all categories of aircraft minimums for the approach are at a decision height (DH) of 1,238 feet and 1/2-mile visibility. The height of DH above the touchdown zone is 200 feet, and a 200-foot ceiling with 1/2-mile visibility. The glide slope intercept altitude is 2,800 feet. The minimum crossing altitude at the locator outer marker (GWNET) is 2,717 feet.

WRECKAGE AND IMPACT INFORMATION

Examination of the wreckage revealed that the accident site was located off of the airport property at an asphalt plant approximately 1,100 feet left of the runway 25-centerline. The airplane initially collided with the tops of trees, and then collided with a gravel berm before coming to rest entangled in a rock crusher conveyor belt machine.

Examination of the airplane revealed that the nose section, flight instruments and cockpit were fragmented throughout the conveyor belt machine. The cabin area was exposed and separated

from the wing center section. The tail-cone was separated at the aft pressure bulkhead with the empennage still attached. The main landing gear assemblies were in the down and locked position. Flight control cable continuity was established throughout the aircraft to all flight control surfaces. Both engines were separated from the wings. Examination of the recovered airframe and flight control system components revealed no evidence of preimpact mechanical malfunction. Examination of the recovered engines and system components revealed no evidence of preimpact mechanical malfunction.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot on December 27, 2006, by the Office of the Medical Examiner of Gwinnet County, Lawrenceville, Georgia, as authorized by the Chief forensic Investigator of Lawrenceville, Georgia. The cause of death was reported as "Generalized Blunt-force Trauma."

Forensic toxicology was performed on specimens from the pilot by the Federal Aviation Administration (FAA) Bioaeronautical Sciences Research Laboratory, Oklahoma City, Oklahoma. The toxicology report stated no ethanol was detected in the liver or muscle, and Phentermine, was detected in the blood and liver. Naproxen was also detected in the blood.

An autopsy was performed on the two passengers on December 27, 2006, by the Office of the Medical Examiner of Gwinnet County, Lawrenceville, Georgia as authorized by the Chief forensic Investigator of Lawrenceville, Georgia. The autopsy findings reported cause of death was due to generalized trauma. Forensic toxicology was performed on specimens from the passengers, and the toxicology report stated negative for drugs and alcohol.

TEST AND RESEARCH

The National Transportation Safety Board requested a flight inspection report of the instrument landing system for LZU on December 25, 2006 for the runway-25 ILS approach system. The flight inspection was completed on December 26, 2006, and the results of the inspection revealed that the ILS runway-25 approach was satisfactory.

Pilot Information

Certificate:	Commercial	**Age:**	44,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 Without waivers/limitations	**Last FAA Medical Exam:**	September 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	April 1, 2005
Flight Time:	631 hours (Total, all aircraft), 406 hours (Total, this make and model), 20 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N62950
Model/Series:	414A	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	414-0086
Landing Gear Type:	Retractable - Tricycle; Ski/wheel	**Seats:**	6
Date/Type of Last Inspection:	March 1, 2006 Annual	**Certified Max Gross Wt.:**	4700 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:	4313 Hrs as of last inspection	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	TSIO-520-J2
Registered Owner:	On file	**Rated Power:**	310 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Night/dark
Observation Facility, Elevation:	KLZU,1061 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	20:45 Local	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Unknown	**Visibility**	0.5 miles
Lowest Ceiling:	Indefinite (V V) / 100 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.68 inches Hg	**Temperature/Dew Point:**	8°C / 8°C
Precipitation and Obscuration:	In the vicinity - Patches - Fog		
Departure Point:	Pahokee, FL (KPHK)	**Type of Flight Plan Filed:**	IFR
Destination:	Lawrenceville, GA (KLZU)	**Type of Clearance:**	IFR
Departure Time:	18:00 Local	**Type of Airspace:**	

Airport Information

Airport:	GWINNETT COUNTY - BRISCOE FIEL LZU	**Runway Surface Type:**	Asphalt
Airport Elevation:	1061 ft msl	**Runway Surface Condition:**	Wet
Runway Used:	25	**IFR Approach:**	ILS
Runway Length/Width:	6000 ft / 100 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:	2 Fatal	**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 Fatal	**Latitude, Longitude:**	33.967777,-83.959167

Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	James A Sayre; FAA/FSDO; College Park, GA Seth Buttner; Cessna; Wichita, KS Jason Lukasik; TCM; Mobile, AL
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Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=65131