



National Transportation Safety Board

Aviation Accident Data Summary

Location:	Columbia, SC	Accident Number:	ATL07FA031
Date & Time:	01/04/2007, 2337 EST	Registration:	N55YS
Aircraft:	Cessna 182P	Injuries:	3 Fatal
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

The pilot was cleared for a Localizer Runway 31 approach at Columbia Owens Downtown Airport, Columbia, South Carolina. Review of radar data for N55YS, revealed the airplane crossed HIDE intersection at 1,300 feet (all altitudes msl), 500 feet below the published minimum crossing altitude. The Minimum Safe Altitude Warning alert activated and was presented on the north radar controller's display as a recurring "LA" to indicate low altitude. The north radar controller did not issue a safety alert to the pilot. The pilot informed the north radar controller that he was executing a missed approach and initiated a right turn instead of executing the published missed approach procedure. The minimum descent altitude for the approach is 660 feet and the airplane-recorded altitude was 400 feet. The radar north controller informed the pilot the airplane was radar contact, to climb and maintain two thousand one hundred and stated, "All right sir, hope you're on a heading of three one zero still on the localizer there, don't get too far to the north, I don't know what's out there at that altitude." The pilot acknowledged the transmission, and was provided the weather at Columbia Metropolitan Airport and vectors for the ILS runway 11at that airport. The pilot was cleared for the ILS runway 11, four miles from the outer marker and instructed to maintain 2,100 feet until established. The decision height for the approach is 436 feet. Review of radar data revealed the airplane crossed the outer marker at 1,700 feet. A low altitude alert was observed on the radar playback from this point for the remainder of the approach. The north radar controller did not issue any safety alerts. The final low altitude alert was at 300 feet, 1 mile from the end of the runway. The pilot was instructed to contact the tower and acknowledged the transmission. After communications were transferred to the local controller in the control tower, the local controller was unable to establish radio contact with N55YS. The local controller made numerous transmissions including a low altitude alert, a clearance to land, weather information, runway visual range, and position correlation information; however, the local controller did not receive a response from the pilot of N55YS. Non-ATC recordings revealed the pilot of N55YS responded to the local controller transmissions; however, the radio calls from N55YS while on the local control frequency were not heard by the controller or recorded by the ATC facility. There was no further contact with the pilot and the radar track went into the coast mode. The airplane was located the following morning about 1 mile west of the runway in a wooded area. Examination of the airframe, flight controls, engine assembly, and accessories revealed no evidence of a pre-crash mechanical failure or malfunction. Examination of the flight instruments revealed no anomalies. There was no entry in the logbook indicating a current altimeter test.

This report was modified on January 25, 2008.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:
The pilot's failure to follow approach procedures by descending below the prescribed descision height

altitude resulting in an in-flight collision with trees and the ground.
This report was modified on January 25, 2008.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

1. OBJECT - TREE(S)
2. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND
3. (C) DECISION HEIGHT - NOT MAINTAINED - PILOT IN COMMAND

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

Findings

4. TERRAIN CONDITION - GROUND

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	57
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine
Flight Time:	7209 hours (Total, all aircraft), 80 hours (Total, this make and model), 118 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Cessna	Registration:	N55YS
Model/Series:	182P	Engines:	1 Reciprocating
Operator:	M.B. Kahn Construction Company Inc.	Engine Manufacturer:	Continental
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-470-S
Flight Conducted Under:	Part 91: General Aviation - Business		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KCAE, 236 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Instrument Conditions	Lowest Ceiling:	Overcast / 200 ft agl
Condition of Light:	Night/Dark	Wind Speed/Gusts, Direction:	4 knots, 110°
Temperature:	17° C / 17° C	Visibility	0.5 Miles
Precipitation and Obscuration:	Fog		
Departure Point:	Newport News, VA (KPHF)	Destination:	Columbia, SC (KCUB)

Airport Information

Airport:	Columbia Metropolitan (KCAE)	Runway Surface Type:	Asphalt
Runway Used:	11	Runway Surface Condition:	Dry
Runway Length/Width:	8602 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Carrol A Smith	Adopted Date:	07/25/2007
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 pubin@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.