



National Transportation Safety Board Aviation Accident Final Report

Location:	Mexia, TX	Accident Number:	ATL02FA058
Date & Time:	03/03/2002, 1350 CST	Registration:	N7272D
Aircraft:	Beech BE-60	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

The pilot arrived at Mexia-Limestone County Airport (TX06), Mexia, Texas, sometime before 1100. Once onboard the airplane, a witness, and an acquaintance of the pilot, closed and locked the airplane's cabin door for the pilot, and walked away from the airplane. He also reported that after the engines to the airplane were started, the airplane stayed on the ramp and idled for 10 to 15 minutes. No one saw the pilot taxi to the runway, but he taxied to the north end of Runway 18 for a downwind takeoff to the south. Examination of the accident site found the wreckage oriented along a path consistent with an extended centerline of runway 18. The airplane was found along a fence line approximately 1/4 mile from the departure end of Runway 18. The airplane's track was along a 183-degree bearing, and there was a large burn area prior to and around the debris zone along the wreckage path. Examination of the cockpit revealed a 9/16-inch hex-head bolt inserted in the control lock pinhole for the control column. Under normal procedures Cockpit Check in the Duke 60 Airplane Flight Manual, for Preflight Inspection the first item listed is: 1. "Control Locks - REMOVE and STOW". In addition, under normal procedures Before Starting check list in the Duke 60 Airplane Flight Manual, the forth item to check is listed as: 4. "Flight Controls - FREEDOM OF MOVEMENT and PROPER RESPONSE"

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to remove the control lock before the flight and his failure to follow the checklist.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) FLIGHT CONTROL, GUST LOCK - NOT REMOVED
2. (C) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

3. OBJECT - FENCE

Factual Information

HISTORY OF FLIGHT

On March 3, 2002 at 1350 central standard time, a Beechcraft BE-60, N7272D, registered to Mapleleaf Acquisitions and operated by the Airline Transport Pilot (ATP), collided with trees and a fence line, approximately 1000 feet from the departure end of runway 18, during takeoff at the Limestone County Airport in Mexia, Texas. The airplane 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 personal flight. The pilot received fatal injuries and the airplane was destroyed and there was a post accident fire. The flight originated from Mexia, Texas, on March 3, 2002, at 1350, with an intended destination of DuPage Airport in Aurora, Illinois.

According to a friend on the afternoon of March 3, 2002, the pilot boarded N7272D for a business flight to Dupage, Illinois. The pilot had spent the morning with his friend in Mexia, Texas, and had been conducting tests or check rides in other airplanes that weekend. The pilot arrived at Mexia-Limestone County Airport (TX06), Mexia, Texas, sometime before 1100. Once onboard the airplane, a witness, and an acquaintance of the pilot, closed and locked the airplane's cabin door for the pilot, and walked away from the airplane. He also reported that after the engines to the airplane were started, the airplane stayed on the ramp and idled for 10 to 15 minutes. No one saw the pilot taxi to the runway, but he taxied to the north end of Runway 18 for a downwind takeoff to the south.

Several witnesses observed the accident. One witness stated that as he was passing by the airport in his car when he observed an airplane attempting to takeoff. The witness stated the airplane lifted off the ground at least twice, but touched back down both times. He said he then watched as the airplane flew into some trees and exploded. Another witness relayed the same information as the first witness and added that she saw the right wing of the airplane strike the ground prior to hitting the trees. She also advised that she saw two separate explosions. The third witness said she observed the airplane, and believed that the pilot was trying to takeoff. She said she watched the airplane leave the ground twice and touch back down both times. She stated that she also saw the right wing of the airplane struck the ground. She said the airplane then spun into some trees and exploded.

PERSONNEL INFORMATION

A review of information on file with the Federal Aviation Administration (FAA), Airman's Certification Division, Oklahoma City, Oklahoma, revealed the pilot was an ATP, with ratings for airplane single engine land, Multi-engine land, and a Certified Flight Instructor in Single and Multi-engine Instrument airplanes. Additionally, the pilot was type rated in the Cessna CE-500, and the Learjet L-18. A review of records on file with the FAA aero medical records revealed the pilot held a second-class medical certificate issued on July 1, 2000 with no restrictions. The pilot reported on his application for the medical certificate the he had accumulated 25,600 total flight hours. The pilot's logbooks were not recovered for examination.

AIRCRAFT INFORMATION

The Beech BE-60, N7272D, S/N P-124, was a six (6) seat, twin engine airplane, and was registered to Mapleleaf Acquisitions, Wilmington, Delaware. The left engine was a Lycoming

TIO-541-A1E4, SN: RL-281-59. The right engine was a Lycoming TIO-541-E1A4, SN: RL-578-59. The airplane's most recent annual inspection was completed on December 1, 2001. The airplane had a total time of 4,363 hours. The airplane was purchased on March 4, 2002, from T&M Aviation, Inc. out of Abbeville, Louisiana for Vintage Wings and Things, LLC. out of LaFayette, Louisiana.

METEOROLOGICAL INFORMATION

Visual meteorological conditions prevailed at the time of the accident. Weather conditions were reported at Waco, Texas at 13:50, as; clear, visibility 10 statute miles, wind 360 degrees at 17 knots gusting to 22 knots, and the altimeter setting at 30.51 inches of mercury.

WRECKAGE AND IMPACT INFORMATION

Examination of the accident site found the wreckage was oriented along a path consistent with an extended centerline of runway 18. The airplane was found along a fence line approximately 1/4 mile from the departure end of Runway 18. The airplane's track was along a 183-degree bearing, and there was a large burn area prior to and around the debris zone along the wreckage path. The wreckage was found on airport property. The landing gear had separated from the airplane, but was determined to have been down and locked at the time of impact. It was reported by the maintenance people at the local FBO that due to his physical size, the pilot was unable to enter the cockpit with the rudder control lock pins in place. They reported removing the rudder control lock, which consisted of a piece of aluminum tubing with orange safety tape tied to it, for movement of the airplane. One of the mechanics revealed that he had installed a 9/16 inch hex head bolt in the control column control lock hole after servicing of the airplane. He reported that it had been the control lock that was installed when he entered the airplane. Both control locks were non-standard, homemade pins.

The left wing was fire damaged and the aileron and flap assemblies remained attached. No flap actuator was found, and the aileron trim tab actuator was no longer connected to structure. The airplane had been modified with the addition of winglets. The left winglet was found separated from the wing, with its structure delaminated, approximately 30 feet from the end of the wing. It was not damaged by fire.

The right wing had impact damage and had separated at the aileron/flap intersection. The inboard portion of the wing was mostly fire damaged. The flap had remained attached, and was also fire damaged. No flap actuator was found. The aileron had remained attached to the outboard section of the wing. This wing section was fire damaged, but intact, with its fuel cap in place.

The empennage was fire damaged. Elevator and rudder trim tab actuators were found lying in the ash. The actuators were separated from structure and their cables during the wreckage examination.

The cabin and cockpit areas were also fire damaged. Examination of the cockpit revealed a 9/16 inch hex-head bolt inserted in the control lock pin hole for the control column. The instruments and avionics were destroyed. The cabin appeared to have been configured in the standard six-place, single club arrangement. Engine control levers were found to be in their midrange positions; however, the control quadrant was lying on the floor of the cabin. Picking up and placing of the control quadrant into its approximate installed position, repositioned the engine control levers to their full forward positions.

The engine remained attached to the wing and was found with its propeller attached. It had tree limbs lying on top of it, and had brush and barbed wire wound around its propeller. The propeller blades were bent aft, and they had leading edge damage, and twisting toward low pitch. The leading edge damage was in the form of scratches and small half circular indentations, consistent with contact with the barbed wire

The engine had partially separated from its wing during the impact sequence. It was found to be fire damaged, and was lying askew from the airplane's heading. Its propeller had been found up the debris path from the main wreckage. The propeller was fire damaged, with leading edge damage consistent with contact with the barbed wire fence. Its blades were distorted and had some twisting toward low pitch.

MEDICAL AND PATHOLOGICAL INFORMATION

A post mortem examination of the pilot was conducted on March 4, 2002, by the Office of the medical examiner in the County of Dallas, State of Texas. The cause of death was listed as "Blunt force injuries, smoke inhalation and thermal injuries." On April 15, 2002, a Toxicology examination of the pilot was conducted by the FAA Toxicology Research Laboratory. The examination revealed carbon monoxide in the blood but no cyanide or ethanol. The examination also revealed 301 (mg/dl) Glucose detected in Vitreous, 6050 (mg/dl) Glucose detected in Urine and 12.4 percent Hemoglobin A1C detected in Blood.

ADDITIONAL INFORMATION

Under normal procedures Cockpit Check in the Duke 60 Airplane Flight Manual, for Preflight Inspection the first item listed is: 1. "Control Locks - REMOVE and STOW"

In addition, under normal procedures Before Starting check list in the Duke 60 Airplane Flight Manual, the fourth item to check is listed as: 4. "Flight Controls - FREEDOM OF MOVEMENT and PROPER RESPONSE"

The wreckage was released to Air Salvage of Dallas and US Specialty Insurance Company, LAD Aviation, 16415 Addison Road STE 800, Addison, Texas, 75001 on March 5, 2002.

Pilot Information

Certificate:	Airline Transport	Age:	55, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	07/01/2000
Occupational Pilot:		Last Flight Review or Equivalent:	12/01/2001
Flight Time:	25600 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N7272D
Model/Series:	BE-60	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	P-124
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	12/01/2001, Annual	Certified Max Gross Wt.:	6775 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	4363 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	TIO-541-A1E4
Registered Owner:	Mapleleaf Acquisitions	Rated Power:	380 hp
Operator:	Dale Lee Lockart	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ACT, 592 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1351 CST	Direction from Accident Site:	260°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	17 knots / 22 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.51 inches Hg	Temperature/Dew Point:	3°C / 16°C
Precipitation and Obscuration:			
Departure Point:	Mexia, TX (LXY)	Type of Flight Plan Filed:	None
Destination:	Aurora, IL (DPA)	Type of Clearance:	None
Departure Time:	1350 CST	Type of Airspace:	Class E

Airport Information

Airport:	Limestone County (LXY)	Runway Surface Type:	Asphalt
Airport Elevation:	543 ft	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	4002 ft / 60 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	31.619167, -96.502778

Administrative Information

Investigator In Charge (IIC):	Butch Wilson	Report Date:	09/01/2004
Additional Participating Persons:	Thomas Tucker; Federal Aviation Administration; Dallas, TX Michael D Hamilton; Federal Aviation Administration; Dallas, TX John B Butler; Textron Lycoming; Arlington, TX Brian D Cassidy; Raytheon Aircraft Company; Wichita, KS		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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](#).