



National Transportation Safety Board

Aviation Accident Data Summary

Location:	DeKalb, IL	Accident Number:	CEN10LA143
Date & Time:	03/02/2010, 1345 CST	Registration:	N129LA
Aircraft:	BEECH 65-A90	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Flight Test		

Analysis

The Beech King Air had undergone maintenance that included a landing gear disassembly and inspection in preparation for the airplane's sale. Following the landing gear inspection, the left main landing gear strut was overfilled to an extension that exceeded maintenance specifications due to the strut not being able to maintain the manufacturer's specified pressure/extension. In preparation for a maintenance test flight relating to engine throttle adjustments, an asymmetric left fuel load was used by the pilot in an attempt to compress the overextended strut at an airplane weight that was less than the maximum gross weight of the airplane. Upon completion of the flight, the pilot returned to the departure airport where he attempted a landing with a left quartering tailwind and with the airplane flaps fully retracted. The airplane touched down between the runway centerline and right side of the runway. The left main landing gear then collapsed, and the airplane veered off the left side of the runway. The pilot, who was also the president of the company that performed the landing gear inspection and other maintenance items, reported that the landing gear was a Beech Queen Air part. Examination of the left main landing gear cylinder revealed that it separated at the lower joint above the upper torque knee. The joint exhibited corrosion and paint on its mating surface. The braze coverage in this area was noted to be acceptable with no anomalous voids. The separation was consistent with torsional overload. The examination also revealed that the landing gear shock assembly was a Beech Queen Air part that was not approved for installation on Beech King Air airplanes.

Flight Events

Landing-flare/touchdown - Landing gear collapse
Landing-landing roll - Collision with terr/obj (non-CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The collapse of the landing gear during landing due to the company's improper maintenance practices and the pilot's decision to take off with an overextended landing gear strut.

Findings

Aircraft-Aircraft systems-Landing gear system-Main gear strut/axle/truck-Incorrect service/maintenance - C
Aircraft-Aircraft systems-Landing gear system-Gear extension and retract sys-Failure - C
Aircraft-Aircraft oper/perf/capability-Performance/control parameters-(general)-Capability exceeded

Pilot Information

Certificate:	Commercial	Age:	42
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	8100 hours (Total, all aircraft), 1200 hours (Total, this make and model), 8000 hours (Pilot In Command, all aircraft), 90 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BEECH	Registration:	N129LA
Model/Series:	65-A90	Engines:	2 Turbo Prop
Operator:	Eagle Air Transport	Engine Manufacturer:	Pratt & Whitney
Air Carrier Operating Certificate:	None	Engine Model/Series:	PT6A-28
Flight Conducted Under:	Part 91: General Aviation - Flight Test		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	DKB, 781 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	Overcast / 2100 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	7 knots, 20°
Temperature:	1° C / -2° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	DeKalb, IL (DKB)	Destination:	DeKalb, IL (DKB)

Airport Information

Airport:	De Kalb Taylor Municipal Airpo (DKB)	Runway Surface Type:	Asphalt
Runway Used:	09	Runway Surface Condition:	Dry
Runway Length/Width:	4201 ft / 75 ft		

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Mitchell F Gallo	Adopted Date:	12/20/2010
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=75461		

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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.

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