



National Transportation Safety Board Aviation Accident Final Report

Location:	Jackson, Tennessee	Accident Number:	ERA16LA320
Date & Time:	September 21, 2016, 16:20 Local	Registration:	N66804
Aircraft:	Beech B100	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

The commercial pilot reported that he had completed several uneventful flights in the multiengine airplane earlier on the day of the accident. He subsequently took off for a return flight to his home airport. He reported that the en route portion of the flight was uneventful, and on final approach for the traffic pattern for landing, all instruments were indicating normal. He stated that the airplane landed "firmly," that the right wing dropped, and that the right engine propeller blades contacted the runway. He pulled back on the yoke, and the airplane became airborne again momentarily before settling back on the runway. The right main landing gear (MLG) collapsed, and the airplane then veered off the right side of the runway and struck a runway sign and weather antenna. Witness reports corroborated the pilot's report.

Postaccident examination revealed that the right MLG actuator was fractured and that the landing gear was inside the wheel well, which likely resulted from the hard landing. The pilot reported that there were no preimpact mechanical failures or malfunctions with the airframe or engine that would have precluded normal operation. Based on the pilot and witness statements and the wreckage examination, it is likely that the pilot improperly flared the airplane, which resulted in the hard landing and the collapse of the MLG.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's improper landing flare, which resulted in a hard landing.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Landing flare - Incorrect use/operation
Environmental issues	Sign/marker - Contributed to outcome

Factual Information

On September 21, 2016, about 1620 central daylight time, a Beech B100, N66804, was substantially damaged when the right main landing gear collapsed during landing at the Mc Kellar-Sipes Regional Airport (MKL), Jackson, Tennessee. The commercial pilot was not injured. Visual meteorological conditions prevailed and an instrument flight rules flight plan was filed for the business flight that originated from Memphis International Airport (MEM), Memphis, Tennessee. The airplane was registered to OIA Enterprises LLC, and operated by a private individual under the provisions of 14 *Code of Federal Regulations* Part 91.

According to the pilot, he was flying businessmen to different airports all day and was returning from MEM to his home airport. The en route portion of the flight was uneventful, and on the final approach leg of the traffic pattern for landing at MKL, he verified that the three green landing gear indicator lights were illuminated, and all instruments were indicating normal. He further stated that the airplane landed "firmly" and the right wing dropped down far enough that the right engine propeller blades contacted the runway. The pilot then pulled back on the control yoke and the airplane became airborne again momentarily, before settling back down on the runway. The right main landing gear collapsed. The airplane then veered off the right side of the runway, struck a runway sign and contacted a weather antenna.

According to witnesses, they watched the airplane land hard on the runway, then the airplane flew back up in the air and landed hard again on the runway. The right landing gear folded-up under the airplane and the airplane slid off the right side of the runway.

Examination of the wreckage by a Federal Aviation Administration inspector revealed that the airplane was resting on its right wing, against the airport's weather service antenna. The right landing gear was inside the wheel-well. The left engine was hanging loose from the motor mounts. After the airplane was raised, the inspector noticed that the right main landing gear actuator was fractured in half.

History of Flight

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

Pilot Information

Certificate:	Airline transport	Age:	69, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	April 6, 2016
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 3, 2016
Flight Time:	(Estimated) 11295 hours (Total, all aircraft), 570 hours (Total, this make and model), 70 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N66804
Model/Series:	B100	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	BE-82
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	April 23, 2016 AAIP	Certified Max Gross Wt.:	11800 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:	4013 Hrs at time of accident	Engine Manufacturer:	Garrett
ELT:	C126 installed, not activated	Engine Model/Series:	TPE-331-6-251
Registered Owner:		Rated Power:	940 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KMKL, 422 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	190°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	31 °C / 18 °C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MEMPHIS, TN (MEM)	Type of Flight Plan Filed:	IFR
Destination:	Jackson, TN (MKL)	Type of Clearance:	IFR
Departure Time:	16:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	MC KELLAR-SIPES RGNL MKL	Runway Surface Type:	Asphalt
Airport Elevation:	433 ft msl	Runway Surface Condition:	Dry
Runway Used:	02	IFR Approach:	None
Runway Length/Width:	6006 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	35.599998, -88.915557(est)

Administrative Information

Investigator In Charge (IIC):	Boggs, Daniel
Additional Participating Persons:	Dan Merrell; FAA/FSDO; Memphis, TN
Original Publish Date:	January 25, 2018
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=94061

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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](#).