



Aviation Investigation Final Report

Location: Oshkosh, Wisconsin Accident Number: GAA18CA171

Date & Time: March 9, 2018, 14:30 Local Registration: N969RA

Aircraft: Beech 76 Aircraft Damage: Substantial

Defining Event: Abnormal runway contact **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The flight instructor reported that he was providing multi-engine instruction to a private pilot who held a single engine airplane rating; the airplane had retractable landing gear. During the pilot's first simulated engine failure, single-engine approach to land, he did not extend the landing gear, and the flight instructor did not verify that the landing gear were extended. During the approach, both pilots heard the landing gear warning horn but disregarded it because of the nature of the maneuver. The airplane touched down on the runway with the landing gear retracted.

The airplane sustained substantial damage to the lower fuselage.

According to the *Airplane Flying Handbook*, page 1-6 Use of Checklist: The importance of consistent use of checklists cannot be overstated in pilot training. A major objective in primary flight training is to establish habit patterns that will serve pilots well throughout their entire flying career. The flight instructor must promote a positive attitude toward the use of checklists, and the student pilot must realize its importance.

The pilot reported that there were no mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Probable Cause and Findings

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

The pilot's failure to extend the landing gear and the flight instructor's failure to ensure that the landing gear were extended during landing. Contributing to the accident were the pilot's and the instructor's improper use of checklist.

Findings

Aircraft	Main landing gear - Not used/operated
Personnel issues	Lack of action - Pilot
Personnel issues	Lack of action - Instructor/check pilot
Personnel issues	Use of checklist - Pilot
Personnel issues	Use of checklist - Instructor/check pilot
Personnel issues	Task monitoring/vigilance - Pilot
Aircraft	Gear extension and retract sys - Not used/operated
Aircraft	Gear position and warning - Related operating info

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Factual Information

History of Flight

Landing-flare/touchdown	Abnormal runway contact (Defining event)
Landing-flare/touchdown	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	43,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	November 1, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 11, 2017
Flight Time:	(Estimated) 8001 hours (Total, all aircraft), 420 hours (Total, this make and model), 5212 hours (Pilot In Command, all aircraft), 44 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Private	Age:	23,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	May 18, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 28, 2017
Flight Time:	(Estimated) 206 hours (Total, all aircraft), 13 hours (Total, this make and model), 146 hours (Pilot In Command, all aircraft), 19 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N969RA
Model/Series:	76 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	1980	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	ME-317
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	March 6, 2018 Annual	Certified Max Gross Wt.:	3900 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	9460.3 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	C126 installed, not activated	Engine Model/Series:	0-360-A1G6D
Registered Owner:		Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KOSH,782 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	185°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	2°C / -10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Oshkosk, WI (OSH)	Type of Flight Plan Filed:	None
Destination:	Oshkosk, WI (OSH)	Type of Clearance:	VFR
Departure Time:	13:30 Local	Type of Airspace:	Class D

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Airport Information

Airport:	WITTMAN RGNL OSH	Runway Surface Type:	Concrete
Airport Elevation:	808 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	8002 ft / 150 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	43.984443,-88.556945(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Michael Dziengel ; FAA; Milwaukee, WI
Original Publish Date:	September 10, 2018
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=96900

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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.

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