



# **Aviation Investigation Final Report**

Location: Gary, Indiana Accident Number: CEN15LA415

Date & Time: September 10, 2015, 20:35 Local Registration: N4199S

Aircraft: Beech 58 Aircraft Damage: Substantial

**Defining Event:** Landing gear collapse **Injuries:** 1 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled

#### **Analysis**

The pilot reported that he lowered the landing gear about 5 miles from the airport while flying an instrument approach. While on short final and as he was turning off the airplane's positioning lights so that the landing gear indicator lights would brighten, the propellers struck the runway, indicating that he likely loss situational awareness of the airplane's altitude above the runway. The airplane then skidded on its belly on the runway. The examination of the airplane revealed that the wing spar sustained substantial damage. The nose landing gear (NLG) doors sustained scraping damage consistent with the NLG being retracted upon touchdown.

During postaccident examinations, the main landing gear and NLG lowered and raised normally, and the landing gear indicator lights operated normally. The landing checklist should be accomplished after the landing gear is lowered and the airplane is in the landing configuration. While on short final, if there are doubts about the landing gear configuration, a go-around should be accomplished. Given that the pilot had not ensured that the landing gear was down, he should have conducted a go-around.

#### **Probable Cause and Findings**

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

The pilot's failure to ensure that the landing gear was down while on short final, his subsequent failure to conduct a go-around, and his loss of situational awareness of the airplane's altitude above the runway while landing.

### **Findings**

Aircraft (general) - Incorrect use/operation

Personnel issues Lack of action - Pilot

Personnel issues Situational awareness - Pilot

Personnel issues Use of checklist - Pilot

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#### **Factual Information**

#### **History of Flight**

Landing

Landing gear collapse (Defining event)

On September 10, 2015, about 2035 central daylight time, a Beech 58 twin-engine airplane, N4199S, sustained substantial damage while landing at Gary/Chicago International Airport (GYY), Gary, Indiana. The pilot, the sole occupant, was not injured. The airplane was registered to Charity Homes, Inc., and operated by Midwest Air Link under the provisions of the 14 Code of Federal Regulations Part 135 as a non-scheduled domestic cargo positioning flight. Night visual meteorological conditions prevailed at the time of the accident, and the flight operated on an activated instrument flight rules flight plan. The flight departed the Columbus Municipal Airport (BAK), Columbus, Indiana, about 2030 eastern daylight time en route to GYY.

The pilot reported that he was flying the runway ILS 30 approach to GYY when he lowered the approach flaps about 5.5 miles from the airport and lowered the landing gear 5 miles from the airport. He reported that as he was turning off the positioning lights, so that the landing gear indicator lights would brighten, the propellers struck the runway and the airplane skidded on its belly on the runway. The pilot closed the throttles and mixture, and turned off the master switch.

The air traffic controller who was in the GYY control tower reported seeing the nose landing light before the airplane touched down.

The examination of the airplane revealed that the airplane's wing spar sustained substantial damage. The belly panels, flaps, and nose landing gear doors sustained scraping damage consistent with contact with the runway. The damage to the nose landing gear doors was consistent with the nose landing gear in the retracted position. There was no damage to the inner or outer landing gear doors.

A Federal Aviation Administration airworthiness inspector provided oversight when the landing gear system was examined. The airplane was put on jacks and the system was checked by lowering and raising the landing gear handle in the cockpit. The main and nose landing gear lowered and raised normally, and the landing gear light indicators operated normally as well.

At 2045, the surface weather observation at GYY was: wind 290 degrees at 5 kts, 20 miles visibility, sky clear, temperature 17 degrees C, dew point 14 degrees C, altimeter 29.92 inches of mercury.

The landing checklist is accomplished after the landing gear is lowered and the airplane is in the landing configuration. While on short final and in the flare, if there are doubts about the landing gear configuration, a go-around should be accomplished.

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### **Pilot Information**

Certificate:	Airline transport; Commercial	Age:	56
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:	March 2, 2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 20, 2015
Flight Time:	4650 hours (Total, all aircraft), 2358 hours (Total, this make and model), 84 hours (Last 90 days, all aircraft), 36 hours (Last 30 days, all aircraft)		

# Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N4199S
Model/Series:	58	Aircraft Category:	Airplane
Year of Manufacture:	1976	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	TH-736
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	August 10, 2015 AAIP	Certified Max Gross Wt.:	5503 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	3243 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	Installed	Engine Model/Series:	IO-520-C
Registered Owner:	Charity Homes Inc	Rated Power:	285 Horsepower
Operator:	Midwest Air Link	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Midwest Air Link	Operator Designator Code:	M4RA

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### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	GYY,596 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	20:45 Local	Direction from Accident Site:	0°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	17°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Columbus, IN (BAK)	Type of Flight Plan Filed:	IFR
Destination:	Gary, IN (GYY )	Type of Clearance:	IFR
Departure Time:	20:30 Local	Type of Airspace:	

### **Airport Information**

Airport:	Gary/Chicago International Air GYY	Runway Surface Type:	Asphalt
Airport Elevation:	596 ft msl	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	ILS
Runway Length/Width:	8859 ft / 150 ft	VFR Approach/Landing:	Full stop

## 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:	41.617221,-87.414443(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Silliman, James
Additional Participating Persons:	Kris Kortokrax; FAA DuPage FSDO; West Chicago, IL
Original Publish Date:	January 5, 2016
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=91989

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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