



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Bremerton, Washington	Accident Number:	WPR23LA157
Date & Time:	April 5, 2023, 15:00 Local	Registration:	N21RS
Aircraft:	Beech 95	Aircraft Damage:	Substantial
Defining Event:	Sys/Comp malf/fail (non-power)	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane had been stored outside for a year, and the flight was the first after an annual inspection that had recently been performed. The pilot reported that while on approach to land, he had a gear safe indicator light, but upon touchdown discovered that the gear had not extended. The airplane sustained substantial damage to the fuselage at the lateral wing spar carry-through structure.

Postaccident examination revealed that the landing gear down limit and down indicator switch, and the warning horn switch were both stuck in the open position. This condition provided a false gear down-and-locked indication and disabled the gear warning horn.

Probable Cause and Findings

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

Failure of the down limit and down indicator switch and the warning horn switch assemblies, which prevented the landing gear from extending and at the same time providing a false indication that the landing gear was extended.

Findings

Aircraft

Landing gear door retract sec - Malfunction

Factual Information

History of Flight

Landing	Sys/Comp malf/fail (non-power) (Defining event)
Landing	Abnormal runway contact

On April 5, 2023, about 1500 Pacific daylight time, a Beech 95, N21RS sustained substantial damage when it was involved in an accident near Bremerton, Washington. The pilot was uninjured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The airplane had been parked on a ramp under a tarpaulin for approximately one year, and that this was the first flight after an annual inspection that had recently been performed. He stated that on final approach for landing, the gear selector lever was down, and the landing gear indicator green light was illuminated. The pilot stated the gear collapsed a few seconds after touchdown, and after viewing the damage, he believed the gear never extended. The airplane sustained substantial damage to the fuselage at the lateral wing spar carry-through structure.

Postaccident examination immediately following the accident revealed that the landing gear did not extend with the gear selector lever in the down position, although the gear status light illuminated green. The aural gear warning horn, which was designed to activate if the gear was retracted with the throttles at low engine power, was also not audible.

Further examination of the gear extension system revealed the landing gear down limit and down indicator switch, along with the interconnected warning horn switch, were stuck in the normally open (NO) position. The NO condition had caused this portion of the electrical circuit to falsely indicate a landing gear down and safe position even though the landing gear was retracted. The NO condition also disabled the landing gear motor circuit and the landing gear warning horn circuit. In this condition the down and locked indicator only needed the landing gear position switch selected to the down position to complete the circuit for a green light gear down indication.

After restoring normal operation to the switches, the landing gear extension and gear warning horn operated normally.

Pilot Information

Certificate:	Commercial	Age:	67,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	October 10, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	898 hours (Total, all aircraft), 540 hours (Total, this make and model), 640 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N21RS
Model/Series:	95	Aircraft Category:	Airplane
Year of Manufacture:	1959	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	TD224
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	March 31, 2023 Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	7266 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	O-360-A4A
Registered Owner:	On file	Rated Power:	180 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:	KPWT, 444 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	14:56 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Few / 4000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 5000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	None /
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	3013 inches Hg	Temperature/Dew Point:	10°C / 1°C
Precipitation and Obscuration:			
Departure Point:	Bremerton, WA	Type of Flight Plan Filed:	None
Destination:	Bremerton, WA	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class E

Airport Information

Airport:	Bremerton National KPWT	Runway Surface Type:	Asphalt
Airport Elevation:	444 ft msl	Runway Surface Condition:	Dry
Runway Used:	20	IFR Approach:	None
Runway Length/Width:	6000 ft / 150 ft	VFR Approach/Landing:	Full stop; Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	47.49025, -122.7648

Administrative Information

Investigator In Charge (IIC):	Blum, Contessa
Additional Participating Persons:	Cliff Barnes; FAA SEA FSDO; Seattle, WA
Original Publish Date:	June 26, 2024
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=107071

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