



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Lebanon, New Hampshire	Accident Number:	ERA23LA302
Date & Time:	July 17, 2023, 10:25 Local	Registration:	N173DT
Aircraft:	POLLOCK MICHAEL D VELOCITY 173RG	Aircraft Damage:	Substantial
Defining Event:	Landing gear collapse	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, during the preflight inspection he noted the battery switch was in the ON position from two days prior and the battery was depleted. He had line personnel from the fixed based operator help jump start the airplane, which started easily, and he spent 20 minutes on the ramp setting up the avionics and preparing for the flight. He checked the voltage and “assumed the battery was accepting charge from the alternator” and elected to depart on the flight. About 10 miles into the flight, he noticed that the panel lighting was dimming, and the avionics turned off. The pilot returned to the departure airport and while enroute, he noticed the alternator circuit breaker was popped. He reset the circuit breaker and power was restored to the avionics. While circling over the airport, he was cleared to land, and attempted to lower the landing gear, however the alternator circuit breaker popped again, and the avionics powered down. The pilot performed an emergency hydraulic dump to lower the landing gear, however, the nose securing bar, which was used to lock the nose gear in the down position when manually extending the landing gear, was located out of reach in the back of the cabin. The pilot asked the tower controller if the nose landing gear was down, and the response indicated that it “appeared to be down.” The pilot landed the airplane, however when the nose landing gear touched down it collapsed, and the airplane slid about 500 ft, resulting in substantial damage to the fuselage. The pilot reported no preimpact 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 store the nose landing gear securing bar within reach in the cabin, which resulted in a nose gear collapse following a manual landing gear extension.

Findings

Personnel issues	Forgotten action/omission - Pilot
Aircraft	Gear extension and retract sys - Inoperative
Aircraft	Nose/tail landing gear - Inoperative

Factual Information

History of Flight

Landing	Landing gear collapse (Defining event)
---------	--

Pilot Information

Certificate:	Commercial; Private	Age:	52, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	May 18, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 14, 2023
Flight Time:	6388 hours (Total, all aircraft), 300 hours (Total, this make and model), 5535 hours (Pilot In Command, all aircraft), 60.9 hours (Last 90 days, all aircraft), 24.8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	POLLOCK MICHAEL D	Registration:	N173DT
Model/Series:	VELOCITY 173RG	Aircraft Category:	Airplane
Year of Manufacture:	1997	Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	001
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	June 14, 2023 Condition	Certified Max Gross Wt.:	2600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1100 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	IO-360
Registered Owner:	On file	Rated Power:	200 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:	LEB,570 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	10:53 Local	Direction from Accident Site:	357°
Lowest Cloud Condition:	Clear	Visibility	9 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.91 inches Hg	Temperature/Dew Point:	27°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lebanon, NH	Type of Flight Plan Filed:	None
Destination:	Dalton, GA (DNN)	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class D

Airport Information

Airport:	Lebanon Municipal Airport LEB	Runway Surface Type:	Asphalt
Airport Elevation:	603 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	5200 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	43.619023,-72.304431(est)

Administrative Information

Investigator In Charge (IIC):	Kemner, Heidi
Additional Participating Persons:	David Roakes; FAA/FSDO; Portland, ME
Original Publish Date:	August 31, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=192662

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](#).