



Aviation Investigation Final Report

Location:	Greenville, North Carolina	Accident Number:	ERA18LA224
Date & Time:	August 18, 2018, 19:50 Local	Registration:	N38WS
Aircraft:	GLASAIR SHA	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While the airplane was climbing through 3,000 ft mean sea level (msl), the engine began running roughly and the fuel flow rate slowed. Shortly after reaching 3,500 ft msl, the engine lost total power. The pilot attempted a forced landing at a nearby airport; however, while in a spiral descent to land, he misjudged the airplane's glidepath and landed in grass short of the runway. The airplane impacted a drainage ditch, resulting in substantial damage. A detailed examination of the engine and components was not conducted and the reason for the loss of engine power could not be determined.

Probable Cause and Findings

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

A total loss of engine power for reasons that could not be determined based on the available information. Contributing to the accident was the pilot's misjudgment of the airplane's glidepath during the forced landing, which resulted in the airplane touching down short of the runway.

Findings

Aircraft	(general) - Unknown/Not determined
Aircraft	Descent/approach/glide path - Not attained/maintained
Personnel issues	Decision making/judgment - Pilot

Factual Information

History of Flight

Enroute-climb to cruise	Loss of engine power (total) (Defining event)
Emergency descent	Landing area undershoot
Emergency descent	Collision with terr/obj (non-CFIT)

On August 18, 2018, about 1950 eastern daylight time, an experimental, amateur-built Glasair SH, N38WS, was substantially damaged when it was involved in an accident near Greenville, North Carolina. The private pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot departed on the cross-country flight and while climbing the airplane through 3,000 ft mean sea level (msl), he noticed that the engine began to run rough; the fuel flow, which was normally “11 to 12, was around 8” gallons per hour. He continued to climb and as he approached 3,500 ft msl, the engine completely “quit.” The pilot spiraled the airplane down to a nearby airport; however, during the last turn to the runway, the airplane was too low. He subsequently landed in the grass short of the runway, where the airplane impacted a drainage ditch before coming to rest.

Examination of the airplane by a Federal Aviation Administration (FAA) inspector revealed that the main landing gear was collapsed, which damaged the underside of the fuselage and wings. Review of the airplane’s maintenance records revealed that an engine overhaul was completed about 716 flight hours before the accident flight and 90 hours since the last condition inspection. No additional examination of the engine was conducted.

Pilot Information

Certificate:	Private	Age:	67,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	March 5, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 18, 2016
Flight Time:	3278 hours (Total, all aircraft), 3277 hours (Total, this make and model), 3270 hours (Pilot In Command, all aircraft), 47 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	GLASAIR	Registration:	N38WS
Model/Series:	SHA	Aircraft Category:	Airplane
Year of Manufacture:	1985	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	198
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	February 23, 2018 Condition	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:	90 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3098 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed, not activated	Engine Model/Series:	O-320 SERIES
Registered Owner:		Rated Power:	160 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:	PGV,28 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	23:50 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	25°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Greenville, SC (GYH)	Type of Flight Plan Filed:	None
Destination:	Greenville, NC	Type of Clearance:	None
Departure Time:	19:35 Local	Type of Airspace:	Class D

Airport Information

Airport:	Pitt-Greenville PGV	Runway Surface Type:	
Airport Elevation:	26 ft msl	Runway Surface Condition:	Holes;Rough;Soft;Vegetation
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

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:	35.635555,-77.384162(est)

Administrative Information

Investigator In Charge (IIC):	Mccarter, Lawrence		
Additional Participating Persons:	Larry E Bass; FAA FSDO; Greensboro, NC		
Original Publish Date:	April 8, 2022	Investigation Class:	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98117		

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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](#).