



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Preliminary Report

Location:	Tullahoma, TN	Accident Number:	ERA24LA254
Date & Time:	June 8, 2024, 06:45 Local	Registration:	N91173
Aircraft:	North American Navion	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

On June 8, 2024, at 0645 central daylight time, a North American Navion, N91173, was substantially damaged when it was involved in an accident near Tullahoma, Tennessee. The private pilot sustained minor injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that he had flown with his mechanic the day before the accident in an attempt to diagnose an intermittent fuel pressure gauge fluctuation and occasional rough running engine during climb. During that flight, they observed the fluctuating fuel pressure indication, but were not able to replicate the rough running engine.

The pilot departed on the accident flight the next day with an “estimated” 6 gallons of fuel in the main fuel tank and between 12 and 14 gallons in the auxiliary tank. The pilot initiated the takeoff from runway 24 with the main fuel tank selected and stated that all indications were normal during the initial climb. While turning onto the crosswind leg of the airport traffic pattern at an altitude about 300 ft above ground level, the engine “instantaneously” lost total power. The pilot pitched the airplane for a speed of 80 mph, switched the fuel selector to the auxiliary tank, and “toggled” the fuel boost pump on and off. The engine “abruptly” began producing power again and the pilot was able to climb the airplane and turned toward runway 06, but shortly thereafter, the engine again lost total power. The airplane subsequently impacted trees and came to rest upright before the runway.

The pilot held a private pilot certificate with ratings for airplane single-engine land and instrument airplane. He also held a glider rating. His Federal Aviation Administration (FAA) BasicMed qualification was completed on July 9, 2023. The pilot reported 1,555 total hours of flight experience, of which 18 hours was in the accident airplane make and model.

Review of photographs provided by an FAA inspector revealed that the airplane sustained substantial damage to the left wing and aft fuselage. During recovery of the airplane,

examination of the main fuel tanks revealed no fuel; the auxiliary fuel tanks contained 10 gallons of fuel. The fuel tanks remained intact and there was no evidence of fuel spillage at the accident site.

The airplane was retained for further examination at a later date.

Aircraft and Owner/Operator Information

Aircraft Make:	North American	Registration:	N91173
Model/Series:	Navion	Aircraft Category:	Airplane
Amateur Built:			
Operator:	On file	Operating Certificate(s) Held:	None
Operator Designator Code:			

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	KTHA, 1083 ft msl	Observation Time:	06:35 Local
Distance from Accident Site:	0 Nautical Miles	Temperature/Dew Point:	15°C / 13°C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	
Lowest Ceiling:	None	Visibility:	10 miles
Altimeter Setting:	29.98 inches Hg	Type of Flight Plan Filed:	NONE
Departure Point:	Tullahoma, TN (THA)	Destination:	Tullahoma, TN

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	35.380125,-86.246778 (est)

Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	Jaime Aguayo; FAA/FSDO; Nashville, TN
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.