



Aviation Investigation Final Report

Location:	Fremont, Michigan	Accident Number:	CEN21LA046
Date & Time:	November 5, 2020, 14:15 Local	Registration:	N4856K
Aircraft:	Navion A	Aircraft Damage:	Substantial
Defining Event:	Fuel starvation	Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he was conducting a local flight with one passenger onboard. The pilot completed the pretakeoff checklist and engine run-up with no problems noted. During the initial climb, the engine “sputtered” and then lost total power. The pilot attempted to conduct a forced landing to grassy terrain, during which the airplane stalled and impacted terrain. The airplane sustained substantial damage to the fuselage and left wing. The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Postaccident examination of the airplane revealed that the fuel selector was in the “right tip-tank” position. However, according to the preflight checklist, the fuel selector should have been in the “main fuel tank” position during takeoff. Based on the found fuel selector position, it is likely that the fuel unported from the tip tanks, which resulted in fuel starvation and a loss of engine power.

Probable Cause and Findings

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

The pilot’s improper positioning of the fuel selector during takeoff, which was not in accordance with the preflight checklist and resulted in fuel starvation, a subsequent total loss of engine power, and an aerodynamic stall during an attempted forced landing.

Findings

Personnel issues	Use of checklist - Pilot
Personnel issues	Use of equip/system - Pilot
Aircraft	Fuel selector/shutoff valve - Incorrect use/operation

Factual Information

History of Flight

Initial climb	Fuel starvation (Defining event)
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Pilot Information

Certificate:	Private	Age:	62, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	June 21, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	329.1 hours (Total, all aircraft), 28.4 hours (Total, this make and model), 286.1 hours (Pilot In Command, all aircraft), 12.1 hours (Last 90 days, all aircraft), 2.5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Navion	Registration:	N4856K
Model/Series:	A	Aircraft Category:	Airplane
Year of Manufacture:	1949	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	NAV-4-1856
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	August 10, 2020 Annual	Certified Max Gross Wt.:	2750 lbs
Time Since Last Inspection:	11 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5207 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	E-225-4
Registered Owner:	On file	Rated Power:	225 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:	KFFX,831 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	14:35 Local	Direction from Accident Site:	232°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	9 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.08 inches Hg	Temperature/Dew Point:	16°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fremont, MI	Type of Flight Plan Filed:	None
Destination:	Fremont, MI	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class E

Airport Information

Airport:	Fremont Municipal Airport FFX	Runway Surface Type:	Asphalt
Airport Elevation:	771 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	3502 ft / 75 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	43.435343,-85.99581 (est)

Administrative Information

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	Ryan Johnson; FAA; Grand Rapids, MI
Original Publish Date:	July 15, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=102254

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