



Aviation Investigation Final Report

Location:	Red Oak, North Carolina	Accident Number:	ERA11LA359
Date & Time:	June 23, 2011, 12:19 Local	Registration:	N75394
Aircraft:	Navion NAVION B	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

Shortly after takeoff, the engine stopped momentarily, recovered, and lost all power. The pilot performed a forced landing in a wooded area and the airplane sustained substantial damage. A postaccident examination of the airframe and engine did not disclose any evidence of a mechanical malfunction. There was adequate fuel on board for the flight. The floor-mounted tank selector handle was found near the off position. It is likely that the pilot inadvertently moved the tank selector handle to the off position prior to the loss of engine power. The pilot had no recollection of the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent movement of the fuel tank selector handle to the off position, resulting in a total loss of engine power due to fuel starvation.

Findings

Aircraft	Fuel selector/shutoff valve - Unintentional use/operation
Personnel issues	Incorrect action performance - Pilot

Factual Information

History of Flight

Initial climb	Loss of engine power (total) (Defining event)
Initial climb	Fuel starvation
Emergency descent	Off-field or emergency landing
Emergency descent	Collision with terr/obj (non-CFIT)

On June 23, 2011, about 1219 eastern daylight time, a Navion B, N75394, was substantially damaged following a total loss of engine power and collision with trees and terrain near Red Oak, North Carolina. The private pilot sustained serious injuries. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed and no flight plan was filed. The flight originated from Double S Airport (19NC), Nashville, North Carolina about 1218 and was destined for Wilson Industrial Air Center Airport (W03), Wilson, North Carolina.

The pilot reported no recollection of the event. The pilot's son reported the following. He was at the airstrip and watched his father perform the preflight inspection. During the engine run-up, the "engine sounded good and strong." The pilot prepared for a takeoff to the south. Shortly after the airplane became airborne, the engine stopped suddenly. A few seconds later, the engine started again and sounded "smooth and strong" like it had previously. The engine quit again a few seconds later and the airplane descended into the trees. The pilot's son found the wreckage in a wooded area and called 911. He reported that, other than opening the canopy, he did not touch anything in the cockpit, nor did he see anyone else touch anything in the cockpit.

An inspector with the Federal Aviation Administration responded to the accident site and examined the wreckage. The left and right wings were structurally damaged from the collision with trees. The fuselage was buckled. The airplane came to rest in a 15- to 20-degree nose down attitude. A dipstick was placed in the main fuel tank and the depth of the fuel was about 6 inches. The floor-mounted fuel tank selector handle was found "just out of off position." The fuel selector handle moved freely and the tank detents were correctly aligned. The electric fuel pump was found in the "on" position and produced 4 to 5 psi of pressure when tested. The fuel drain was opened and the fuel appeared "clear and uncontaminated." The fuel tank cap seals were in good condition. Aileron continuity was established; rudder and elevator continuity could not be established due to impact damage.

Pilot Information

Certificate:	Private	Age:	81, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	September 9, 2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 1, 2008
Flight Time:	932 hours (Total, this make and model), 956 hours (Pilot In Command, all aircraft), 1 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Navion	Registration:	N75394
Model/Series:	NAVION B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2054B
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	January 27, 2011 Annual	Certified Max Gross Wt.:	2850 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2652 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	GO-435C2
Registered Owner:	SHANKS VON R	Rated Power:	260 Horsepower
Operator:	SHANKS VON R	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	RWI,159 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.9 inches Hg	Temperature/Dew Point:	28°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Nashville, NC (19NC)	Type of Flight Plan Filed:	None
Destination:	Wilson, NC (W03)	Type of Clearance:	None
Departure Time:	12:18 Local	Type of Airspace:	

Airport Information

Airport:	Double S Airport 19NC	Runway Surface Type:	Grass/turf
Airport Elevation:	195 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	2400 ft / 100 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	36.055557,-77.921669(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	Zilmond W Strader; FAA/FSDO; Greensboro, NC
Original Publish Date:	December 1, 2011
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=80875

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