



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	North Myrtle Beach, South Carolina	Accident Number:	ERA23LA336
Date & Time:	August 13, 2023, 17:35 Local	Registration:	N22RE
Aircraft:	Cessna 182P	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that he visually confirmed there were 52 gallons of fuel onboard and that both fuel caps were secure to their respective fuel port during his preflight inspection of the airplane. The pilot then departed on the approximate 1 hour and 15-minute flight. While en route, the "low fuel light" flickered on and off. The pilot noted the fuel gauge was reading half full, and he continued with the flight. When the airplane was about 8 minutes from the destination airport, and after descending to traffic pattern altitude, the engine stopped producing power. The pilot was unable to restart the engine and made a forced landing to a highway. The airplane impacted a jersey barrier during the landing, which resulted in substantial damage to the airframe.

Federal Aviation Administration inspectors examined the airplane accident site and observed that the left wing fuel cap was missing and blue fuel stains were evident on the wing aft of the fuel cap that extended to the trailing edge of the flap. Recovery personnel also reported that both fuel tanks were empty when the wings were removed for transport. The missing fuel cap was not located. Based on this information, it is likely that the pilot did not properly secure the left fuel cap during the preflight inspection, and that during the flight it separated from the airplane. The remaining fuel was siphoned from the fuel tanks through the open fuel port, resulting in fuel exhaustion, and the total 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 failure to properly secure the left wing fuel cap, which resulted in a loss of engine power due to fuel exhaustion.

Findings

Personnel issues	Preflight inspection - Pilot
Aircraft	Fuel storage - Incorrect use/operation

Factual Information

History of Flight

Prior to flight	Aircraft inspection event
Enroute-descent	Fuel exhaustion (Defining event)
Landing-landing roll	Collision during takeoff/land

Pilot Information

Certificate:	Private	Age:	25, 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:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	July 7, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 5, 2023
Flight Time:	101 hours (Total, all aircraft), 8 hours (Total, this make and model), 0 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N22RE
Model/Series:	182P	Aircraft Category:	Airplane
Year of Manufacture:	1974	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18263425
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-540
Registered Owner:	STANLEY AERO CLUB INC	Rated Power:	230 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:	KCRE, 31 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	17:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.96 inches Hg	Temperature/Dew Point:	32°C / 27°C
Precipitation and Obscuration:			
Departure Point:	Gastonia, NC (AKH)	Type of Flight Plan Filed:	None
Destination:	North Myrtle Beach, NC (CRE)	Type of Clearance:	VFR flight following
Departure Time:	16:25 Local	Type of Airspace:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	33.6891,-78.8867

Administrative Information

Investigator In Charge (IIC):	Read, Leah
Additional Participating Persons:	Todd Clamp; FAA/FSDO; Columbia
Original Publish Date:	January 25, 2024
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=192862

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](#).