



Aviation Investigation Final Report

Location:	Dunnellon, Florida	Accident Number:	ERA24LA117
Date & Time:	February 20, 2024, 12:38 Local	Registration:	N8158F
Aircraft:	Cessna 150	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, approximately 8 miles from the destination airport, and while flying at 2,000 ft mean sea level, the engine experienced a total loss of power. The pilot attempted to restart the engine but was unsuccessful. The pilot subsequently conducted a forced landing to a blueberry field impacting several sprinkler heads, which resulted in substantial damage to both wings.

The pilot stated that during his preflight inspection, a calibrated fuel dipping stick for the accident airplane make and model was not available, so the pilot “took a look down” into the fuel tanks and was relying on the instrument panel-mounted fuel gauges to determine the quantity of fuel in the airplane. The gauges read about ½ full for both tanks and the pilot felt confident that was sufficient for the planned 23-minute flight.

A Federal Aviation Administration inspector examined the airplane after the accident. The inspector observed that both fuel tanks were intact and that only a minimal amount of fuel remained in each. The inspector also noted that the fuel gauges in the instrument panel read “at E on the left tank and just above E on the right tank.” Based on this information, it is most likely that the pilot inaccurately determined the amount of fuel available for the flight prior to departure, which subsequently resulted in fuel exhaustion and a 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 inadequate preflight fuel planning, which resulted in fuel exhaustion and a subsequent total loss of engine power.

Findings

Personnel issues	Knowledge of equipment - Pilot
Personnel issues	Decision making/judgment - Pilot
Aircraft	Fuel - Fluid level
Aircraft	Fuel - Inadequate inspection

Factual Information

History of Flight

Prior to flight	Preflight or dispatch event
Enroute	Fuel exhaustion (Defining event)
Landing	Off-field or emergency landing

Pilot Information

Certificate:	Private	Age:	41,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	November 17, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	171.6 hours (Total, all aircraft), 21.1 hours (Total, this make and model), 116.4 hours (Pilot In Command, all aircraft), 65.7 hours (Last 90 days, all aircraft), 40.6 hours (Last 30 days, all aircraft), 6.4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N8158F
Model/Series:	150 F	Aircraft Category:	Airplane
Year of Manufacture:	1966	Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	15064258
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	O-200
Registered Owner:	On file	Rated Power:	100 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:	CGC, 10 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	12:55 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	22°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Brooksville, FL (BKV)	Type of Flight Plan Filed:	None
Destination:	Dunnellon, FL (X35)	Type of Clearance:	VFR
Departure Time:	12:15 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	29.007256,-82.511324(est)

Administrative Information

Investigator In Charge (IIC):	Enders, Ryan
Additional Participating Persons:	Christopher Oaks; FAA/FSDO; Tampa, FL
Original Publish Date:	May 3, 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=193826

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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](#).