



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	Hampton, Georgia	<b>Accident Number:</b>	ERA20CA176
<b>Date &amp; Time:</b>	May 9, 2020, 15:13 Local	<b>Registration:</b>	N4661N
<b>Aircraft:</b>	Cessna 402	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Fuel exhaustion	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Aerial observation		

---

## Analysis

According to the commercial pilot and a flight instructor rated check pilot, they were conducting their first long-duration, aerial observation flight in the multiengine airplane, which was recently acquired by the operator. They departed with full fuel tanks, completed the 5-hour aerial observation portion of the flight, and began to return to the destination airport. About 15 miles from the airport, the left engine fuel warning light illuminated. Within a few seconds, the right engine stopped producing power. They attempted to restart the engine and turned the airplane toward an alternate airport that was closer. The pilots then turned on the electric fuel pump, the right engine began surging, and soon after the left engine stopped producing power. They turned both electric fuel pumps to the low setting, both engines continued to surge, and the pilots continued toward the alternate airport. When they were about 3 miles from the airport, both engines lost total power, and they elected to land on a highway. When they were a few feet above the ground, power returned briefly to the left engine, which resulted in the airplane climbing and beginning to roll. The commercial pilot pulled the yoke aft to avoid a highway sign, which resulted in an aerodynamic stall, and subsequent impact with trees and terrain. The airplane sustained substantial damage to the wings and fuselage. Although both pilots reported the fuel gauges indicated 20 gallons of fuel remaining on each side when the engines stopped producing power, the flight instructor noted that there was no fuel in the airplane at the time of the accident. In addition, according to a Federal Aviation Administration inspector who responded to the accident site, both fuel tanks were breached and there was no evidence of fuel spillage.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A dual total loss of engine power as a result of fuel exhaustion.

## Findings

Aircraft

Fuel - Fluid management

## Factual Information

### History of Flight

Enroute	Fuel exhaustion
Emergency descent	Fuel exhaustion (Defining event)
Landing-flare/touchdown	Abrupt maneuver
Landing-flare/touchdown	Collision during takeoff/land

### Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	70, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	July 1, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 18, 2019
Flight Time:	7330 hours (Total, all aircraft), 11 hours (Total, this make and model), 7300 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

### Pilot Information

Certificate:	Commercial; Private	Age:	26, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	August 27, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 10, 2018
Flight Time:	1096 hours (Total, all aircraft), 5.9 hours (Total, this make and model), 934.2 hours (Pilot In Command, all aircraft), 272.7 hours (Last 90 days, all aircraft), 23.3 hours (Last 30 days, all aircraft), 5.9 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N4661N
Model/Series:	402 C	Aircraft Category:	Airplane
Year of Manufacture:	1978	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	402C0019
Landing Gear Type:	Retractable - Tricycle	Seats:	3
Date/Type of Last Inspection:	February 27, 2020 Annual	Certified Max Gross Wt.:	6850 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	17081 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	C126 installed, not activated	Engine Model/Series:	TSIO-520 SER
Registered Owner:		Rated Power:	325 Horsepower
Operator:		Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HMP, 882 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	15:15 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.21 inches Hg	Temperature/Dew Point:	17° C / -1° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Atlanta, GA (FFC )	Type of Flight Plan Filed:	None
Destination:	Atlanta, GA (FFC )	Type of Clearance:	VFR flight following
Departure Time:	09:21 Local	Type of Airspace:	Class E

## Airport Information

<b>Airport:</b>	Henry County Airport HMP	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	882 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	24	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5500 ft / 75 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor	<b>Latitude, Longitude:</b>	33.375831,-84.297225(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Kemner, Heidi		
<b>Additional Participating Persons:</b>	Danny Cox; FAA/FSDO; Atlanta, GA		
<b>Original Publish Date:</b>	February 2, 2021	<b>Investigation Class:</b>	4
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.		
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=101257">https://data.nts.gov/Docket?ProjectID=101257</a>		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).