



National Transportation Safety Board Aviation Accident Final Report

Location:	Longs, SC	Accident Number:	GAA20CA001
Date & Time:	10/01/2019, 1055 EDT	Registration:	N95131
Aircraft:	Taylorcraft BC12	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that, during preflight preparations, he estimated that the flight time would be about 2 hours 29 minutes with a total fuel burn of 10.1 gallons. The airplane departed with 12 gallons of fuel. About 2 hours 25 minutes into the flight, the engine quit. The pilot navigated toward a nearby field to make an off-airport landing. During the landing, he saw a deep ditch and a house, so he attempted to ground loop the airplane to the left. Both wings impacted trees. The airplane sustained substantial damage to both wings. The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation. The pilot reported as a safety recommendation that adding a fuel stop would have prevented the accident.

The Federal Aviation Administrator inspector who examined the airplane reported that the nose tank had evidence of fuel being in it recently (the indicator cork was still wet with fuel), but no fuel remained in the tank. Both the right and left wing tanks were examined, and no fuel remained in either tank. No evidence of a fuel spill was found on the airplane or the ground.

Probable Cause and Findings

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

The pilot's improper fuel planning, which resulted in fuel exhaustion, a total loss of engine power, an off-airport landing, and impact with trees.

Findings

Aircraft	Fuel - Fluid level (Cause)
Personnel issues	Fuel planning - Pilot (Cause)
Environmental issues	Tree(s) - Effect on operation (Cause)

Factual Information

History of Flight

Enroute	Fuel exhaustion Loss of engine power (total) (Defining event)
Landing	Off-field or emergency landing Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial	Age:	66, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
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:	11/09/2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	08/16/2018
Flight Time:	(Estimated) 5094 hours (Total, all aircraft), 27 hours (Total, this make and model), 5094 hours (Pilot In Command, all aircraft), 36 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Taylorcraft	Registration:	N95131
Model/Series:	BC12 D	Aircraft Category:	Airplane
Year of Manufacture:	1959	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	9531
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	08/16/2019, Annual	Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4791.1 Hours at time of accident	Engine Manufacturer:	Continental
ELT:	C91 installed, not activated	Engine Model/Series:	A65-8
Registered Owner:	N95131 Aviation Llc	Rated Power:	65 hp
Operator:	N95131 Aviation Llc	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KCRE, 33 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	1453 UTC	Direction from Accident Site:	174°
Lowest Cloud Condition:		Visibility	10 Miles
Lowest Ceiling:	Overcast / 5500 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.15 inches Hg	Temperature/Dew Point:	27° C / 21° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Forest, VA (W90)	Type of Flight Plan Filed:	None
Destination:	North Myrtle Beach, SC (CRE)	Type of Clearance:	None
Departure Time:	0830 EDT	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:	33.929722, -78.735556 (est)

Administrative Information

Investigator In Charge (IIC):	Eric M Gutierrez	Report Date:	05/21/2020
Additional Participating Persons:	Donald E Dingeldein; FAA; West Columbia, SC		
Publish Date:	05/21/2020		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=100362		

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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](#).