



Aviation Investigation Final Report

Location:	Richmond, Virginia	Accident Number:	GAA18CA537
Date & Time:	September 5, 2018, 13:00 Local	Registration:	C-GODA
Aircraft:	Cessna 180	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, on final approach, about 4 miles from the runway, the engine lost all power. He diverted to an open field, but during the approach, the airplane struck a power line and then impacted the field. The pilot further reported that, although he filled the fuel tanks before the flight, he misunderstood how long the airplane could fly with full fuel and thought that he had enough fuel to complete the flight.

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.

Probable Cause and Findings

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

The pilot's improper preflight fuel planning and in-flight fuel management, which resulted in fuel exhaustion and the total loss of engine power.

Findings

Aircraft	Fuel - Fluid management
Personnel issues	Fuel planning - Pilot
Aircraft	Fuel - Fluid level

Factual Information

History of Flight

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

Pilot Information

Certificate:	Airline transport	Age:	55, Male
Airplane Rating(s):	Multi-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	June 20, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 11, 2018
Flight Time:	(Estimated) 8700 hours (Total, all aircraft), 185 hours (Total, this make and model), 4500 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	C-GODA
Model/Series:	180 Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	1955	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	31434
Landing Gear Type:	Tricycle; Amphibian	Seats:	4
Date/Type of Last Inspection:	May 4, 2018 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2999 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO 470 J
Registered Owner:		Rated Power:	225 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:	KRIC, 163 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	17:40 Local	Direction from Accident Site:	172°
Lowest Cloud Condition:	Scattered / 4000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.21 inches Hg	Temperature/Dew Point:	32°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Oshawa (CY00)	Type of Flight Plan Filed:	VFR
Destination:	Richmond, VA (RIC)	Type of Clearance:	VFR
Departure Time:	09:15 Local	Type of Airspace:	Class C

Airport Information

Airport:	RICHMOND INTL RIC	Runway Surface Type:	Asphalt
Airport Elevation:	167 ft msl	Runway Surface Condition:	Dry
Runway Used:	20	IFR Approach:	None
Runway Length/Width:	6607 ft / 150 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	37.539165,-77.325836(est)

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	Ken Bain; FAA; Richmond, VA
Original Publish Date:	March 20, 2020
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98248

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](#).