



Aviation Investigation Final Report

Location: Cameron, South Carolina Accident Number: ERA09LA151

Date & Time: February 1, 2009, 15:30 Local Registration: N3066E

Aircraft: Aeronca 7AC Aircraft Damage: Substantial

Defining Event: Loss of engine power (partial) **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that he had been flying for about 1 hour, and was at an altitude of 800 feet mean sea level, when the engine began to run rough. The pilot elected to perform a precautionary off-airport landing to a nearby cotton field. During the subsequent landing roll, the airplane nosed over and sustained substantial damage to the firewall and vertical stabilizer. Examination of the engine, which included a test run, did not reveal any preimpact malfunctions. A weather observation taken at an airport located about 30 miles southeast of the accident site, about the time of the accident, included a temperature of 16 degrees Celsius (C) and a dew point of -4 degrees C. The pilot did not use the carburetor heat control after experiencing the engine roughness; however, atmospheric conditions at the time were not conducive to the formation of carburetor ice.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power for undetermined reasons.

Findings

Not determined (general) - Unknown/Not determined

Factual Information

History of Flight

Enroute-cruise Loss of engine power (partial) (Defining event)

Emergency descent Off-field or emergency landing

Landing-landing roll Nose over/nose down

On February 1, 2009, about 1530 eastern standard time, an Aeronca 7AC, N3066E, was substantially damaged during a precautionary landing near Cameron, South Carolina. The certificated commercial pilot was not injured. Visual meteorological conditions prevailed and no flight plan had been filed for the local flight that departed Owens Field (CUB), Columbia, South Carolina. The personal flight was conducted under the provisions of 14 Code of Federal Regulations (CFR) Part 91.

The pilot reported that he had been flying for about 1 hour, and was at an altitude of 800 feet mean sea level, when the airplane's engine began to run rough. The pilot elected to perform a precautionary off-airport landing to a nearby cotton field. During the subsequent landing roll, the airplane nosed over and sustained substantial damage to the firewall and vertical stabilizer. The pilot did not recall the engine rpm and did not use the carburetor heat control after experiencing the engine roughness. He further stated that he departed CUB with 13 gallons of fuel, which he checked prior to takeoff and was absent of contamination.

Examination of the airplane by a Federal Aviation Administration (FAA) inspector did not reveal any preimpact malfunctions. In addition, the engine was started and test run with no anomalies noted.

The airplane had been operated for about 15 hours since its most recent annual inspection, which was performed on December 20, 2008.

The pilot reported 800 hours of total flight experience, which included about 200 total hours in the same make and model as the accident airplane.

A weather observation taken at an airport about 30 miles southeast of the accident site, at 1553, reported: winds from 200 degrees at 11 knots; visibility 10 statute miles; sky clear; temperature 16 degrees Celsius (C); dew point -4 degrees C; altimeter 30.15 inches of mercury.

According to the carburetor icing chart contained in the FAA publication Winter Flying Tips, P-8740-24, the atmospheric conditions at the time of the accident were not conducive for the formation of carburetor ice.

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Pilot Information

Certificate:	Commercial	Age:	56,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 29, 2008
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 22, 2008
Flight Time:	800 hours (Total, all aircraft), 200 hours (Total, this make and model), 8 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aeronca	Registration:	N3066E
Model/Series:	7AC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	7AC-6655
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	December 20, 2008 Annual	Certified Max Gross Wt.:	1250 lbs
Time Since Last Inspection:	15 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5442 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	A-65-8
Registered Owner:	On file	Rated Power:	65 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:	CUB,193 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	15:53 Local	Direction from Accident Site:	145°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C / -4°C
Precipitation and Obscuration:			
Departure Point:	Columbia, SC (CUB)	Type of Flight Plan Filed:	None
Destination:	Columbia, SC (CUB)	Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	

Airport Information

Airport:	NONE	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Precautionary landing

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:	33.556945,-80.64833(est)

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Administrative Information

Investigator In Charge (IIC): Schiada, Luke

Additional Participating Persons:

Original Publish Date: July 28, 2009

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=73305

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.

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