



National Transportation Safety Board

Aviation Accident Final Report

Location:	Columbus, Ohio	Accident Number:	CEN11CA136
Date & Time:	December 27, 2010, 22:46 Local	Registration:	N888CA
Aircraft:	Aero Commander 500-B	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 Minor
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

Prior to the flight, the pilot preflighted the airplane and recalled observing the fuel gauge indicating full; however, he did not visually check the fuel tanks. The airplane departed and the en route portion of the flight was uneventful. During the downwind leg of the circling approach, the engines began to surge and the pilot added full power and turned on the fuel boost pumps. While abeam the approach end of the runway on the downwind leg, the engines again started to surge and subsequently lost power. He executed a forced landing and the airplane impacted terrain short of the runway. A postaccident examination by Federal Aviation Administration inspectors revealed the fuselage was buckled in several areas, and the left wing was crushed and bent upward. The fuel tanks were intact and approximately one cup of fuel was drained from the single fuel sump. Fueling records indicated the airplane was fueled 3 days prior to the accident with 135 gallons of fuel or approximately 4 hours of operational time. Flight records indicated the airplane had flown approximately 4 hours since refueling when the engines lost power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper fuel management which resulted in a loss of engine power due to fuel exhaustion.

Findings

Personnel issues	Fuel planning - Pilot
Aircraft	Fuel - Fluid level

Factual Information

History of Flight

Approach-circling (IFR)	Fuel exhaustion
Approach-circling (IFR)	Loss of engine power (total) (Defining event)
Emergency descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	45, Male
Airplane Rating(s):	Single-engine land; Multi-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 1 Without waivers/limitations	Last FAA Medical Exam:	April 26, 2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 6, 2010
Flight Time:	5700 hours (Total, all aircraft), 3525 hours (Total, this make and model), 4700 hours (Pilot In Command, all aircraft), 278 hours (Last 90 days, all aircraft), 73 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aero Commander	Registration:	N888CA
Model/Series:	500-B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	1318-127
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	October 28, 2010 AAIP	Certified Max Gross Wt.:	6750 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	24922 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, activated, did not aid in locating accident	Engine Model/Series:	IO-540
Registered Owner:		Rated Power:	290 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	ZJWA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	Distance from Accident Site:		
Observation Time:	Direction from Accident Site:		
Lowest Cloud Condition:	1000 ft AGL	Visibility	9 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Jeffersonville, IN (JVY)	Type of Flight Plan Filed:	IFR
Destination:	Columbus, OH	Type of Clearance:	IFR
Departure Time:	21:45 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	40.079723, -83.072776(est)

Administrative Information

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	John Welsh; Federal Aviation Administration; Columbus, OH
Original Publish Date:	May 26, 2011
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=78087

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](#).