



Aviation Investigation Final Report

Location:	Sussex, New Jersey	Accident Number:	ERA14CA118
Date & Time:	February 9, 2014, 15:00 Local	Registration:	N103KW
Aircraft:	Bellanca 7KCAB	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that he did not verify the quantity of fuel in the airplane's fuel tanks prior to departure. About 15 minutes into the flight, the engine began to "sputter," then experienced a total loss of power. After looking at the airplane's fuel gauges, the pilot determined that the airplane had "run out of fuel." The pilot subsequently conducted a forced landing to a snow-covered field. Upon touchdown, the airplane nosed over and came to rest inverted, resulting in substantial damage to the right wing. The pilot reported there were no mechanical malfunctions or anomalies that would have precluded normal operation of the airframe or engine.

Probable Cause and Findings

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

Findings

Personnel issues	Preflight inspection - Pilot
Aircraft	Fuel - Fluid level
Environmental issues	Snowy/icy terrain - Contributed to outcome

Factual Information

History of Flight

Prior to flight	Preflight or dispatch event
Enroute-cruise	Fuel exhaustion (Defining event)
Emergency descent	Off-field or emergency landing
Landing-flare/touchdown	Nose over/nose down

Pilot Information

Certificate:	Private	Age:	41
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	February 25, 2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 27, 2012
Flight Time:	200 hours (Total, all aircraft), 30 hours (Total, this make and model), 150 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	Registration:	N103KW
Model/Series:	7KCAB	Aircraft Category:	Airplane
Year of Manufacture:	1975	Amateur Built:	
Airworthiness Certificate:	Aerobatic	Serial Number:	512-75
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	April 1, 2013 Annual	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2500 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-320-E2A
Registered Owner:	AVIATION CLUB OF SUSSEX LLC	Rated Power:	150 Horsepower
Operator:	AVIATION CLUB OF SUSSEX LLC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FWN,421 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	14:53 Local	Direction from Accident Site:	283°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 5500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	-3°C / -14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sussex, NJ (FWN)	Type of Flight Plan Filed:	None
Destination:	Sussex, NJ (FWN)	Type of Clearance:	None
Departure Time:	15:00 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	41.2,-74.623054(est)

Administrative Information

Investigator In Charge (IIC): Diaz, Allison

Additional Participating Persons:

Original Publish Date: June 5, 2014

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=88788>

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](#).