



Aviation Investigation Final Report

Location:	HARVEL, Illinois	Accident Number:	CHI93LA250
Date & Time:	July 12, 1993, 09:17 Local	Registration:	N4201Y
Aircraft:	BELLANCA 8KCAB	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT FILLED HER FUEL TANKS ON JULY 3, 1993 AND MADE A SHORT TRIP FROM DELAVAN, WISCONSIN TO KENOSHA, WISCONSIN ON THAT DAY. THE PILOT ASSUMED SHE HAD 33.5 GALLONS OF FUEL LEFT WHEN SHE DEPARTED KENOSHA ON JULY 12, 1993. NEAR TAYLORVILLE, ILLINOIS, THE PILOT NOTICED LOWER THAN EXPECTED FUEL GAUGE READINGS. SHE TRIED TO BE VECTORED TO TAYLORVILLE AIRPORT BUT THE AIRPLANE RAN OUT OF FUEL, AND THE ENGINE LOST TOTAL POWER. THE PILOT LINED UP ON A BEAN FIELD FOR A FORCED LANDING. THE AIRCRAFT WAS DESTROYED DURING THE FORCED LANDING.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S INADEQUATE PREFLIGHT PLANNING.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE

Findings

1. (F) FLUID,FUEL - EXHAUSTION
2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. FUEL CONSUMPTION CALCULATIONS - POOR - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - EMERGENCY

Factual Information

On July 12, 1993, about 0917 central daylight time, a Bellanca Decathlon (BL30); N4201Y, was destroyed and the private pilot was seriously injured when the aircraft experienced an engine problem, and impacted the ground. The pleasure flight, originating from Kenosha Municipal Airport, Kenosha, Wisconsin, was operating under 14 CFR Part 91 in visual meteorological conditions with no flight plan on file.

The flight departed Kenosha, Wisconsin approximately 0715 CDT, for St. Jacob, Illinois, on the first leg of a cross country flight to Houston, Texas. The pilot's first planned fuel stop was to be St. Jacob, Illinois (3K6).

Having filled the tanks on July 3, 1993, and making only a short trip from Delavan, Wisconsin to Kenosha, Wisconsin on that day, the pilot assumed she had 33.5 gallons of fuel left when she departed ENW for 3K6 on July 12, 1993.

The pilot reported that "In the general vicinity of the Taylorville Airport, I noticed that the aircraft fuel gauges indicated that the fuel supply was lower than it should have been." She also noticed that the weather was deteriorating, and decided to locate an alternate airport, Taylorville Airport, to check her fuel supply, and also to get an updated weather briefing.

The pilot contacted Taylorville on the Unicom frequency and described some landmarks to them to get a good heading toward the airport. Unable to discern her location, Taylorville suggested a 270 heading and a frequency. After contacting the facility, she was told to squawk a code. At this point, the engine began to sputter. The pilot stated that "It seemed as though I was running out of fuel, but this did not seem possible since I had only flown a little over two hours, and departed with enough fuel for over three hours of flight time."

Realizing she would have to make a forced landing, the pilot lined up with a bean field, and set up for a landing in the field. The aircraft was destroyed during the forced landing.

Investigation found the main fuel filter was approximately half full. The carburetor fuel filter was wet with no significant amount of fuel in the filter cavity. Inspection of the right wing fuel tank revealed a small amount of fuel in the lower rear inboard corner of the tank. The left wing came to rest, inverted, about the right wing. While rolling the aircraft to expose the top of the left wing, approximately one half pint of fuel ran out of the fuel line from the left tank, which had been cut to facilitate the removal of the pilot. Probing the tank revealed less than a gallon of fuel remaining in the tank.

Medical personnel stated that they noticed a definite lack of fuel smell or visible fuel during the removal of the pilot.

Post-accident examination revealed no evidence of pre-impact mechanical malfunction with airframe, engine or accessories.

Pilot Information

Certificate:	Private	Age:	37,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	July 14, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	257 hours (Total, all aircraft), 42 hours (Total, this make and model), 165 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELLANCA	Registration:	N4201Y
Model/Series:	8KCAB 8KCAB	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Aerobatic	Serial Number:	294-77
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	January 1, 1993 Annual	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:	8 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1262 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	AEID-320-E1B
Registered Owner:	LYNNE F. ZIELINSKI	Rated Power:	150 Horsepower
Operator:	LYNNE F. ZIELINSKI	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SPI ,597 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	08:50 Local	Direction from Accident Site:	343°
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	23°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	KENOSHA , WI (ENW)	Type of Flight Plan Filed:	None
Destination:	ST. JACOB , IL (3K6)	Type of Clearance:	None
Departure Time:	07:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	39.350254,-89.530387(est)

Administrative Information

Investigator In Charge (IIC):	Dinwiddie, Carl
Additional Participating Persons:	BOB THORPE; SPRINGFIELD , IL
Original Publish Date:	July 25, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=9234

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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](#).