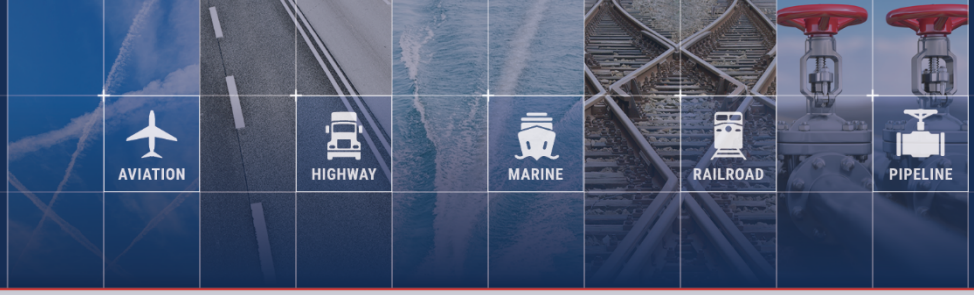

Aviation Investigation Final Report

Location:	BURLINGTON, Wisconsin	**Accident Number:**	CHI99LA048
Date & Time:	December 4, 1998, 12:25 Local	**Registration:**	N395AC
Aircraft:	Bellanca 8GCBC	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot said that he was in a visual descent to land when the airplane's engine lost most of its power. The pilot applied carburetor heat, but the engine lost more power. The pilot elected to perform an emergency landing on a lake. The pilot said that the lake was not long enough to stop the airplane before coming in contact with the shore. Examination of the airplane revealed no anomalies. Weather conditions reported at Kenosha, Wisconsin, 14 miles east-southeast of the accident site were overcast ceiling of 200 feet, 1 mile visibility, temperature 52 degrees Fahrenheit, and dew point 52 degrees Fahrenheit. According to the Department of Transportation/Federal Aviation Administration/CT-82/44 Publication: Light Aircraft Piston Engine Carburetor Ice Detector/Warning Device Sensitivity/ Effectiveness, June 1982, Carburetor Icing Probability Chart; these conditions places the probability for carburetor icing in the 'serious icing at cruise power' area of the chart.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Carburetor ice, the pilot's inadequate pre-flight planning/preparation resulting in his flight into poor weather conditions, and the pilot's improper use of carburetor heat. Factors contributing to this accident were the carburetor icing conditions, the rising embankment at the shoreline and the trees.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CLIMB

Findings
1. (C) FUEL SYSTEM,CARBURETOR - ICE
2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. (C) CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND
4. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS

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

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

Findings
5. (F) TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT
6. (F) OBJECT - TREE(S)

Factual Information

On December 4, 1998, at 1225 central standard time (cst), a Bellanca 8GCBC, N395AC, operated by a commercial pilot, lost engine power while the airplane was in cruise flight. During the subsequent forced landing to a lake, the airplane was substantially damaged when it skipped off of the water and impacted into trees which lined the shore. Instrument meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under 14 CFR Part 91. There was no flight plan on file. The pilot reported no injuries. The cross-country flight originated at Rochester, Indiana, at 1100 cst, and was en route to Rochester, Wisconsin.

In his written statement, the pilot said that he was in a visual descent to land at the Fox River Airport, Rochester, Wisconsin, when the airplane's engine lost most of its power. The pilot said that he applied carburetor heat, but the engine lost more power. The pilot elected to perform an emergency landing on an unknown lake. The pilot said that the lake was not long enough to stop the airplane before coming in contact with the shore.

A Federal Aviation Administration (FAA) inspector examined the airplane at the accident site. The airplane was resting upright in a wooded area approximately 20 feet inland from the shore of a small lake. The airplane's right wing was bent aft and the trailing edge was twisted downward. The right rear cabin window was broken inward. The airplane's left wing was bent aft. The outboard 2 feet of the left wing and wing tip were bent upward approximately 40 degrees. Flight control continuity was confirmed. Examination of the airplane's engine, engine controls, and other airplane systems revealed no anomalies.

Weather conditions reported at Kenosha, Wisconsin, 14 miles east- southeast of the accident site, at 1129 cst, were overcast ceiling of 200 feet, 1 mile visibility, temperature 52 degrees Fahrenheit, and dew point 52 degrees Fahrenheit. According to the Department of Transportation/Federal Aviation Administration/ CT-82/44 Publication: Light Aircraft Piston Engine Carburetor Ice Detector/Warning Device Sensitivity/Effectiveness, June 1982, Carburetor Icing Probability Chart; these conditions places the probability for carburetor icing in the "serious icing at cruise power" area of the chart.

Pilot Information

Certificate:	Airline transport; Commercial	**Age:**	43,Male
Airplane Rating(s):	Single-engine sea; Multi-engine land	**Seat Occupied:**	Front
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	November 1, 1998
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	5000 hours (Total, all aircraft), 500 hours (Total, this make and model), 75 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	**Registration:**	N395AC
Model/Series:	8GCBC 8GCBC	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	395-98
Landing Gear Type:	Amphibian	**Seats:**	2
Date/Type of Last Inspection:	August 8, 1998 Annual	**Certified Max Gross Wt.:**	2150 lbs
Time Since Last Inspection:	3 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	98 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-360-C1G
Registered Owner:	SEAIR, INC.	**Rated Power:**	180 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	ENW ,721 ft msl	**Distance from Accident Site:**	14 Nautical Miles
Observation Time:	12:29 Local	**Direction from Accident Site:**	110°
Lowest Cloud Condition:	Unknown	**Visibility**	1 miles
Lowest Ceiling:	Overcast / 200 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	40°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	11°C / 11°C
Precipitation and Obscuration:	N/A - None - Rain		
Departure Point:	ROCHESTER , IN (RCR)	**Type of Flight Plan Filed:**	None
Destination:	(96C)	**Type of Clearance:**	None
Departure Time:	11:00 Local	**Type of Airspace:**	Class E

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 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	42.670726,-88.269943(est)

Administrative Information

Investigator In Charge (IIC):	Bowling, David
Additional Participating Persons:	EDWARD STACONIS; MILWAUKEE , WI
Original Publish Date:	May 19, 1999
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=45411