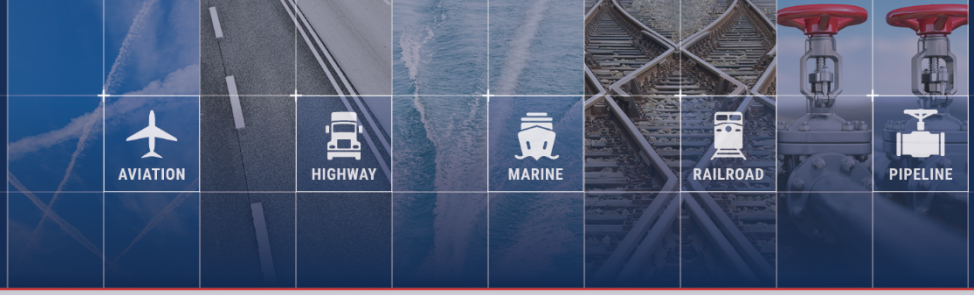

Aviation Investigation Final Report

Location:	Ferdinand, Indiana	**Accident Number:**	CEN18TA233
Date & Time:	June 18, 2018, 22:45 Local	**Registration:**	N3002X
Aircraft:	Cessna 150F	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot and passenger were on a cross-country personal flight at 2,500 ft mean sea level and were about 15 miles north of their destination airport. They began the descent, and during the descent, the engine sputtered, followed by a total loss of power. The pilot attempted to troubleshoot the loss of power but was unsuccessful; however, he did not apply carburetor heat during the troubleshooting. Subsequently, the pilot made a forced landing to a parking lot. During the landing roll, the airplane impacted an embankment and nosed over.

Postaccident examination of the airplane revealed that fuel was present in the fuel tanks and the fuel lines to the carburetor. Examination revealed no evidence of any preimpact mechanical failures or malfunctions that would have precluded normal operation. Weather conditions at the time of the accident were conducive to the accumulation of serious carburetor icing at glide power settings. It is likely that, during the descent, carburetor ice accumulated due to the pilot's failure to apply carburetor heat, which resulted in the loss of engine power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to apply carburetor heat in conditions conducive to the accumulation of carburetor icing, which resulted in a total loss of engine power.

Findings

Personnel issues	Lack of action - Pilot
Environmental issues	Conducive to carburetor icing - Effect on equipment
Aircraft	Intake anti-ice, deice - Not used/operated
Environmental issues	Sloped/uneven terrain - Contributed to outcome

Factual Information

History of Flight

Approach	Loss of engine power (total) (Defining event)
Approach	Attempted remediation/recovery
Landing	Off-field or emergency landing
Landing	Nose over/nose down

On June 18, 2018, about 2245 eastern daylight time, a Cessna 150F airplane, N3002X, made a forced landing in a parking lot then nosed over in an embankment. The private rated pilot sustained serious injuries and the passenger sustained minor injuries. The airplane sustained substantial damage. The airplane was registered to Gas Publishing LLC and operated by the pilot under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a personal flight. Night visual meteorological conditions prevailed at the time of the accident and no flight plan had been filed. The flight departed Central Wisconsin Airport (CWA), Mosinee, Wisconsin, about 1700 central daylight time and was en route to Perry County Municipal Airport (TEL), Tell City, Indiana.

After the accident, the pilot reported that before the flight he had filled the long range fuel tanks with 35 gallons of fuel. He stated that about 15 miles north of TEL at 2,500 ft mean seal level, the engine sputtered. The pilot was unable to troubleshoot the engine issue and the engine experienced a total loss of power. He made a forced landing to a paved parking lot between two rows of parked semi-trailers. The airplane landed hard and nosed over when it impacted an embankment (figure 1). The pilot and passenger exited the airplane under their own power. The pilot reported that there were not mechanical malfunctions or failures with the airplane.

Figure 1 – Accident Site (photo courtesy of the Indiana State Police)

The pilot stated to the responding Federal Aviation Administration (FAA) inspector that he did not apply carburetor heat during the troubleshoot. The pilot added that he tried to make it to Huntingburg Airport (HNB), Huntingburg, Indiana, but did not have enough altitude so he made an off-field landing. During the final approach to the paved area the pilot saw power lines and a utility pole; he stated that he banked the airplane to avoid the power lines and pole.

The FAA inspector examined the engine and did not find any anomalies that would have precluded normal operation. There was a smell of aviation fuel at the accident site. An unmeasured amount of fuel remained in the fuel tanks during the recovery of the airplane. Also, fuel was present in the fuel lines to the carburetor.

The carburetor icing probability chart included in Federal Aviation Administration Special Airworthiness Information Bulletin No. CE-09-35, Carburetor Icing Prevention, indicated that the airplane was operating in an area that was associated with a serious risk of carburetor ice accumulation at glide power settings (figure 2).

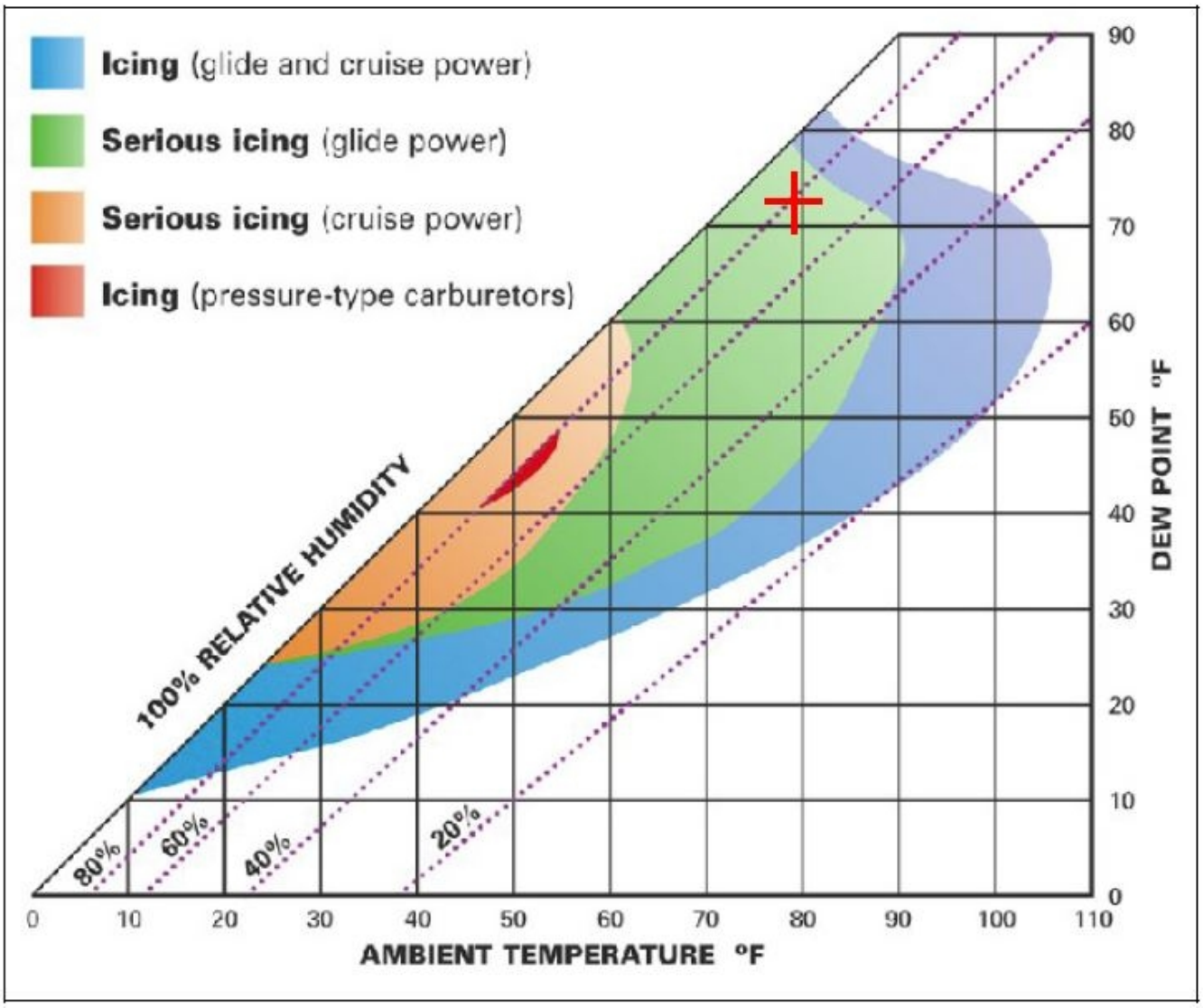

Figure 2 – Carburetor icing probability chart

Pilot Information

Certificate:	Private	**Age:**	52,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
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 2 With waivers/limitations	**Last FAA Medical Exam:**	July 18, 2017
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	February 25, 2017
Flight Time:	1009 hours (Total, all aircraft), 48 hours (Total, this make and model), 947 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N3002X
Model/Series:	150F F	**Aircraft Category:**	Airplane
Year of Manufacture:	1966	**Amateur Built:**	
Airworthiness Certificate:	Utility	**Serial Number:**	15064402
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	1601 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Continental Motors
ELT:		**Engine Model/Series:**	O-200A
Registered Owner:		**Rated Power:**	100 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night
Observation Facility, Elevation:	KHNB,529 ft msl	**Distance from Accident Site:**	4 Nautical Miles
Observation Time:	22:56 Local	**Direction from Accident Site:**	295°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	200°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.04 inches Hg	**Temperature/Dew Point:**	26°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mosinee, WI (CWA)	**Type of Flight Plan Filed:**	None
Destination:	Tell City, IN (TEL)	**Type of Clearance:**	None
Departure Time:	17:00 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	Huntingburg HNB	**Runway Surface Type:**	
Airport Elevation:	529 ft msl	**Runway Surface Condition:**	Unknown
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Serious, 1 Minor	**Latitude, Longitude:**	38.220554,-86.873054(est)

Administrative Information

Investigator In Charge (IIC):	Lindberg, Joshua
Additional Participating Persons:	William Schneider; Federal Aviation Administration; Indianapolis, IN
Original Publish Date:	February 5, 2019
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97528