



Aviation Investigation Final Report

Location:	PORT WING, Wisconsin	Accident Number:	CEN15LA413
Date & Time:	September 5, 2015, 10:15 Local	Registration:	N328TV
Aircraft:	VENUS CP328 SUPER EMERAUDE	Aircraft Damage:	Substantial
Defining Event:	Collision during takeoff/land	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that she had flown the airplane locally to reduce fuel weight and was on approach to land on a hay field. During the approach, the pilot turned on the carburetor heat and the fuel boost pump. The pilot reported that, after she turned the airplane onto the final approach, she thought that it was a little low, so she applied engine power to reach the airstrip. She further stated that, although the engine continued to run, there was a lack of engine power. The pilot pulled back slightly on the flight controls to avoid a hay bale, but the airplane's tail struck the bale. The airplane flipped over and came to rest inverted. The pilot reported that there were no mechanical malfunctions with the airplane.

Weather conditions at the time of the accident were conducive to the formation of serious carburetor icing at glide power. Given the weather conditions, it is likely that the carburetor accumulated ice during the short approach but that insufficient time existed for the carburetor heat to melt the ice, which led to the reduction 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 undershooting the landing area and the subsequent impact with a hay bale. Also causal to the accident was the operation of the airplane in conditions conducive to carburetor icing, which reduced the engine power during the landing.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Descent/approach/glide path - Not attained/maintained
Environmental issues	Conducive to carburetor icing - Effect on equipment
Environmental issues	(general) - Contributed to outcome

Factual Information

History of Flight

Landing	Landing area undershoot
Landing	Loss of engine power (partial)
Landing	Collision during takeoff/land (Defining event)
Landing	Nose over/nose down

On September 5, 2015, about 1015 central daylight time, an experimental amateur-built Venus CP328 Super Emeraude airplane, N328TV, impacted a hay bale and nosed over during landing on a private airstrip near Port Wing, Wisconsin. The private pilot, who was the sole occupant, sustained minor injuries. The fuselage was substantially damaged. The airplane was registered to and operated by the pilot as a 14 Code of Federal Regulations Part 91 personal flight. Day visual meteorological conditions prevailed at the accident site about the time of the accident, and the flight was not operating on a flight plan. The local flight originated from the airstrip about 1010.

According to the pilot's accident report, the overall plan was to fly Young Eagles from a hay field at the annual Port Wing Fall Festival. The field was approximately 2,500 feet long with slightly rolling terrain. The runway's grass was long and wet from rain the night before. The pilot felt that the grass reduced airplane performance and had a 40-foot wide strip mowed on the smooth part of field. The pilot made another takeoff and landing on the recently mowed strip and felt that it took longer to attain flying speed; however, it did not seem unreasonable at the time. There were a few hay bales at the north end of the strip but the pilot felt that they would not be in the way.

The pilot started a subsequent takeoff with a passenger on board and aborted the takeoff due to the way the airplane was accelerating.

After the aborted takeoff, the pilot elected to fly the airplane solo to reduce some fuel weight. During this accident flight, the pilot turned carburetor (carb) heat and the fuel boost pump on. The pilot's report, in part, stated:

Turned to final and felt I was a little low and applied power. Throttle went in, engine continued to run, no roughness or dead cylinder, but there was a definite lack of power. Pulled back slightly to avoid hay bale [at] the end of field and the tail stuck the bale. The plane flipped over and came to rest inverted.

At 1053, the recorded weather at the John F Kennedy Memorial Airport (ASX), near Ashland, Wisconsin, about 124 degrees and 23 miles from the accident site, was: Wind 200 degrees at 4 knots; visibility 10 statute miles; sky condition clear; temperature 27 degrees C; dew point 22 degrees C; altimeter 29.99 inches of mercury.

The temperature and dew point at ASX was plotted on an icing chart. Their intersection was in the serious icing range at glide power.

The pilot indicated that there were no mechanical malfunctions and was "convinced" that carb icing occurred due to "a rather short approach plus the weather that the carb heat did not have time to take care of any residual ice."

Pilot Information

Certificate:	Private	Age:	71
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	January 21, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 14, 2014
Flight Time:	1040.5 hours (Total, all aircraft), 40.4 hours (Total, this make and model), 1040.5 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	VENUS	Registration:	N328TV
Model/Series:	CP328 SUPER EMERAUDE	Aircraft Category:	Airplane
Year of Manufacture:	1993	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	118
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 20, 2015 Condition	Certified Max Gross Wt.:	1550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	449.4 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91 installed	Engine Model/Series:	O-320-A2C
Registered Owner:	On file	Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KASX,826 ft msl	Distance from Accident Site:	23 Nautical Miles
Observation Time:	10:53 Local	Direction from Accident Site:	124°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	27°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PORT WING, WI	Type of Flight Plan Filed:	None
Destination:	PORT WING, WI	Type of Clearance:	None
Departure Time:	10:10 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:	46.768611,-91.38861(est)

Administrative Information

Investigator In Charge (IIC):	Malinowski, Edward
Additional Participating Persons:	Rexford White; Federal Aviation Administration; Milwaukee, WI
Original Publish Date:	January 21, 2016
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=91983

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