



Aviation Investigation Final Report

Location:	Sioux Falls, South Dakota	Accident Number:	GAA16CA022
Date & Time:	October 19, 2015, 16:15 Local	Registration:	N9780G
Aircraft:	Cessna 180H	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he received information Papa prior to landing, information Papa was wind 240 degrees at 20 knots, and he was landing on runway 33. He reported that it "occurred" to him that it was a 20 knot direct crosswind.

The pilot reported that while landing in crosswind conditions, he was "holding extreme" left aileron to compensate for the crosswind. He reported that as the airplane touched down, a gust lifted the left wing, and he was "unable to keep it down" with aileron control inputs. Subsequently the right wing impacted the runway, and the airplane ground looped.

The pilot reported that there were no pre-impact mechanical failures or malfunctions with the airframe or engine that would have precluded normal operation. The airplane sustained substantial damage to the right aileron.

According to the manufacturer, the accident airplane's Owner's Manual does not specify a demonstrated maximum crosswind component, however a similar make and model airplane's Pilot Operating Handbook specifies a maximum demonstrated crosswind component of 12 knots.

Probable Cause and Findings

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

The pilot's decision to land with a 20 knot direct cross wind, which resulted in a loss of directional control and the right wing impacting terrain and a subsequent ground loop.

Findings

Personnel issues	Decision making/judgment - Pilot
Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained
Aircraft	Crosswind correction - Capability exceeded
Environmental issues	Crosswind - Effect on operation

Factual Information

History of Flight

Landing	Loss of control in flight (Defining event)
Landing	Abnormal runway contact

Pilot Information

Certificate:	Private	Age:	72, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	January 30, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 20, 2014
Flight Time:	(Estimated) 1200 hours (Total, all aircraft), 350 hours (Total, this make and model), 1180 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9780G
Model/Series:	180H H	Aircraft Category:	Airplane
Year of Manufacture:	1972	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18052280
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	May 8, 2015 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4200 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	C91 installed, not activated	Engine Model/Series:	O-470
Registered Owner:	On file	Rated Power:	230 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:	KFSD,1427 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	20:56 Local	Direction from Accident Site:	276°
Lowest Cloud Condition:	Few / 25000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	7 knots / 15 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.73 inches Hg	Temperature/Dew Point:	26°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CHAMBERLAIN, SD (9V9)	Type of Flight Plan Filed:	IFR
Destination:	Sioux Falls, SD (FSD)	Type of Clearance:	IFR
Departure Time:	15:15 Local	Type of Airspace:	Class D

Airport Information

Airport:	JOE FOSS FIELD FSD	Runway Surface Type:	Concrete
Airport Elevation:	1430 ft msl	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	Visual
Runway Length/Width:	8000 ft / 150 ft	VFR Approach/Landing:	Full stop

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:	43.576667,-96.735557(est)

Administrative Information

Investigator In Charge (IIC):	Vanover, Jackie
Additional Participating Persons:	Jim Bad Horse; FAA; Rapid City, SD
Original Publish Date:	January 15, 2016
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=92206

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