



Aviation Investigation Final Report

Location:	Astoria, Oregon	Accident Number:	SEA07CA116
Date & Time:	April 29, 2007, 12:50 Local	Registration:	N1911V
Aircraft:	Cessna 172M	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

During the takeoff roll in a 30 degree crosswind of about 12 knots, the aircraft passed on the leeward side of a number of hangars of varying size. As the aircraft passed through the area where the wind was blocked by the individual hangars into areas where the wind was not blocked, the student pilot failed to adequately compensate for the resultant change in wind velocity and direction. As the student pilot continued the takeoff, the aircraft departed the side of the runway, impacted a taxiway exit sign, and entered into an area of wet, soft ground. The student pilot then pulled the power to idle and applied "full brakes." The nose gear then dug into the terrain and ultimately collapsed. There were no anomalies found in the rudder or nose wheel steering systems.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's failure to adequately correct for changing wind conditions, leading to a loss of directional control during the takeoff ground roll. Factors include wet, soft terrain along the side of the runway.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. (F) TERRAIN CONDITION - WET
4. (F) TERRAIN CONDITION - SOFT
5. OBJECT - SIGN

Factual Information

During the takeoff roll in a 30 degree crosswind of about 12 knots, the aircraft passed on the leeward side of a number of hangars of varying size. As the aircraft passed through the area where the wind was blocked by the individual hangars into areas where the wind was not blocked, the student pilot failed to adequately compensate for the resultant change in wind velocity and direction. As the student pilot continued the takeoff, the aircraft departed the side of the runway, impacted a taxiway exit sign, and entered into an area of wet, soft ground. The student pilot then pulled the power to idle and applied "full brakes." The nose gear then dug into the terrain and ultimately collapsed. There were no anomalies found in the rudder or nose wheel steering systems.

Student pilot Information

Certificate:	Student	Age:	55,Male
Airplane Rating(s):	None	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	May 1, 2006
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	67 hours (Total, all aircraft), 65 hours (Total, this make and model), 11 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1911V
Model/Series:	172M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17263791
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	February 1, 2007 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-D2G
Registered Owner:	Byron D. Edmonds	Rated Power:	
Operator:	Gorge Winds Aviation, Inc.	Operating Certificate(s) Held:	None
Operator Does Business As:	Gorge Winds Aviation	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KAST, 15 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	12:45 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Astoria, OR (KAST)	Type of Flight Plan Filed:	VFR
Destination:	Kelso, WA (KKLS)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Astoria Regional KAST	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	4990 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 None	Latitude, Longitude:	46.119697,-123.670661(est)

Administrative Information

Investigator In Charge (IIC): Anderson, Orrin

Additional Participating Persons:

Original Publish Date: June 27, 2007

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=65661>

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