



Aviation Investigation Final Report

Location:	Pacific City, Oregon	Accident Number:	SEA02LA041
Date & Time:	February 15, 2002, 12:20 Local	Registration:	N2434C
Aircraft:	Cessna 180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While landing on a 30 foot-wide runway in steady crosswind conditions, the aircraft encountered an unexpected gust of wind. Although the pilot tried to correct for the unfavorable wind conditions, his attempts to do so were not adequate to keep the aircraft from departing the side of the runway. After departing the runway surface, the aircraft encountered a swampy area, and nosed over in about nine inches of water. The pilot later realized that wind funneling between buildings and trees located alongside the runway had created a funnel effect that produced areas of crosswind gusts.

Probable Cause and Findings

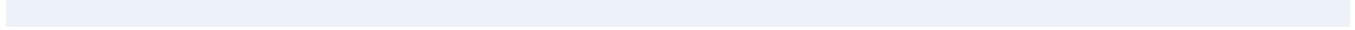
The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate compensation for local wind conditions during the landing roll. Factors include unfavorable winds, and a swampy area adjacent to the runway.

Findings

Occurrence #1: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

1. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
2. (F) WEATHER CONDITION - UNFAVORABLE WIND
3. (F) TERRAIN CONDITION - SWAMPY



Factual Information

On February 15, 2002, at 1220 Pacific standard time, a Cessna 180, N2434C, nosed over during the landing roll at Pacific City State Airport, Pacific City, Oregon. The private pilot and his passenger were not injured, but the aircraft, which is owned and operated by the pilot, sustained substantial damage. The 14 CFR Part 91 pleasure flight, which departed McMinnville, Oregon, about 30 minutes earlier, was being operated in visual meteorological conditions. No flight plan had been filed. There was no report of an ELT activation.

According to the pilot, while he was on final, he could tell that there was a fairly constant crosswind of a little over 10 knots, accompanied by "...some light turbulence." When the aircraft was about 30 feet above the ground, the pilot felt "...the burble caused by the wind disturbed by buildings and trees, but no gusts." A few moments after touching down on the centerline of the 30 foot-wide runway, the aircraft was hit by "a strong gust of wind," and veered toward the right side of the runway. Although the pilot attempted to correct for the unfavorable wind conditions, his attempts to do so were not adequate, and the aircraft ultimately departed the right side of the runway. After leaving the runway surface, the aircraft encountered an adjacent swampy area and nosed over in about nine inches of water.

The pilot later stated that immediately after the accident, he realized that the openings between the buildings and trees had caused a "funnel effect," which resulted in limited areas of gusty winds across the runway surface.

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):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	October 3, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	April 28, 2000
Flight Time:	842 hours (Total, all aircraft), 393 hours (Total, this make and model), 767 hours (Pilot In Command, all aircraft), 46 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N2434C
Model/Series:	180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	30734
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2019 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-470-J
Registered Owner:	John M. Rockwood	Rated Power:	235 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	235°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	McMinnville, OR (MMV)	Type of Flight Plan Filed:	None
Destination:	Pacific City, OR (PFC)	Type of Clearance:	None
Departure Time:	11:50 Local	Type of Airspace:	Class G

Airport Information

Airport:	Pacific City PFC	Runway Surface Type:	Asphalt
Airport Elevation:	40 ft msl	Runway Surface Condition:	Dry
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	1875 ft / 30 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:	45.190174,-123.960571(est)

Administrative Information

Investigator In Charge (IIC): Anderson, Orrin

Additional Participating Persons: Thomas McGar; Portland FSDO

Original Publish Date: May 21, 2002

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=54213>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).