



# Aviation Investigation Final Report

<b>Location:</b>	HILLSBORO, Oregon	<b>Accident Number:</b>	SEA97LA187
<b>Date &amp; Time:</b>	August 13, 1997, 14:27 Local	<b>Registration:</b>	N76233
<b>Aircraft:</b>	Cessna 140	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

During the landing roll on runway 30, the pilot lost control of the tailwheel-equipped Cessna 140 and departed the left side of the runway, ground looping. He reported that both flight following and the Hillsboro tower advised him of calm winds prior to landing and that during the landing a 'wind gust blew hard to the left.' Wind reports taken at the Hillsboro airport reported calm winds five minutes after the accident as well as throughout the morning and early afternoon hours with the exception of variable winds of 4 and 5 knots at 1350 and 1250 hours respectively. An FAA inspector assigned at the Hillsboro airport reported the weather conditions as a 'sultry day' with calm winds. The pilot reported no mechanical malfunction with the aircraft.

## Probable Cause and Findings

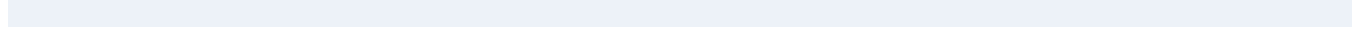
The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain directional control during landing.

## Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

### Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND



## Factual Information

On August 13, 1997, at 1427 hours Pacific daylight time, a Cessna 140, N76233, registered to Barbara L. Baker, and being flown by a private pilot, was substantially damaged during a loss of control during landing at the Portland- Hillsboro airport, Hillsboro, Oregon. The pilot and his wife were uninjured. Visual meteorological conditions existed at the time and a VFR flight plan had been filed for the flight. The flight, which was personal, was to have been operated under 14CFR91, and had departed Eugene, Oregon, at 1230 on the day of the accident.

The pilot reported that upon arrival in the Hillsboro area the "wind advisory from both flight following and (the) tower were winds calm, 30 in use." He entered a left base for runway 30, was cleared to land and executed a "normal 3 point landing @ ~ 45 mph" during which a "wind gust blew hard to the left." The pilot further reported that he "tried (sic) to stay on (the) runway" and then "entered a ground loop leaving (the) runway to (the) left."

Aviation surface weather observations taken at the Hillsboro airport reported winds as follows:

TIME	WINDS	1547	calm	1455	calm	1432	calm	1350	variable at 4 knots	1250	variable at 5 knots	1155	calm	1047	calm	949	calm	855	calm	753	calm
------	-------	------	------	------	------	------	------	------	---------------------	------	---------------------	------	------	------	------	-----	------	-----	------	-----	------

An Inspector assigned to the Federal Aviation Administration (FAA) Flight Standards District Office at the Hillsboro airport, and who was on site at the time of the accident reported the weather conditions as a "sultry day" with calm winds.

The pilot reported that there was no mechanical malfunction with the aircraft.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	52,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	June 9, 1997
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	213 hours (Total, all aircraft), 173 hours (Total, this make and model), 135 hours (Pilot In Command, all aircraft), 46 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N76233
<b>Model/Series:</b>	140 140	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	10636
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	April 3, 1997 Annual	<b>Certified Max Gross Wt.:</b>	1450 lbs
<b>Time Since Last Inspection:</b>	35 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2814 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	C-90-12F
<b>Registered Owner:</b>	BAKER, BARBARA, L.	<b>Rated Power:</b>	90 Horsepower
<b>Operator:</b>	BAKER, GARY, H.	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	HIO ,204 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	14:32 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	25 miles
<b>Lowest Ceiling:</b>	Broken	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/ None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	32°C / 12°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	EUGENE (EUG )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	(HIO )	<b>Type of Clearance:</b>	VFLF
<b>Departure Time:</b>	12:30 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	PORTLAND-HILLSBORO HIO	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	204 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	30	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6600 ft / 150 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	45.580169,-122.910964(est)

## Administrative Information

**Investigator In Charge (IIC):** McCreary, Steven

**Additional Participating Persons:** STEVEN ALBERT; HILLSBORO, OR

**Original Publish Date:** November 6, 1998

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=42673>

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](#).