



# Aviation Investigation Final Report

<b>Location:</b>	VANCOUVER, Washington	<b>Accident Number:</b>	SEA89LA101
<b>Date &amp; Time:</b>	June 5, 1989, 18:25 Local	<b>Registration:</b>	N96202
<b>Aircraft:</b>	TAYLORCRAFT BC-12D	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

THE PILOT WAS PRACTICING MAIN WHEEL LANDINGS IN THE CONVENTIONAL GEAR EQUIPPED AIRCRAFT AND LOST CONTROL DURING GROUND LANDING ROLL. THE AIRCRAFT GROUND LOOPED AND NOSED OVER. A 70 DEGREE, 12 KNOT CROSSWIND EXISTED AT THE TIME OF THE ACCIDENT.

## 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 GROUND ROLL, RESULTING IN A GROUND LOOP AND NOSE OVER. THE CROSSWIND IS CONSIDERED TO BE A CONTRIBUTING FACTOR TO THE ACCIDENT.

## Findings

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

### Findings

1. (F) WEATHER CONDITION - CROSSWIND
2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. (C) GROUND LOOP/SWERVE - NOT CORRECTED - PILOT IN COMMAND

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Occurrence #2: NOSE OVER  
Phase of Operation: LANDING - ROLL

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	45, 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>	December 12, 1988
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	304 hours (Total, all aircraft), 69 hours (Total, this make and model), 244 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	TAYLORCRAFT	<b>Registration:</b>	N96202
<b>Model/Series:</b>	BC-12D BC-12D	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	8502
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	April 10, 1989 100 hour	<b>Certified Max Gross Wt.:</b>	1200 lbs
<b>Time Since Last Inspection:</b>	15 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	9322 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	A-65-8
<b>Registered Owner:</b>	EVERGREEN FLYING SERVICE, INC	<b>Rated Power:</b>	65 Horsepower
<b>Operator:</b>	EVERGREEN FLYING SVC	<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>	PDX ,26 ft msl	<b>Distance from Accident Site:</b>	4 Nautical Miles
<b>Observation Time:</b>	17:53 Local	<b>Direction from Accident Site:</b>	210°
<b>Lowest Cloud Condition:</b>	Scattered / 6000 ft AGL	<b>Visibility</b>	40 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	12 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	350°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	VANCOUVER , WA (59S )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(59S )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	17:20 Local	<b>Type of Airspace:</b>	Airport advisory area

## Airport Information

<b>Airport:</b>	EVERGREEN 59S	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	310 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	28	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2650 ft / 42 ft	<b>VFR Approach/Landing:</b>	Touch and go

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	45.629756,-122.519195(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Mangum, Prentiss
<b>Additional Participating Persons:</b>	KEITH CREMINS; HILLSBORO , OR
<b>Original Publish Date:</b>	August 2, 1990
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=41025">https://data.nts.gov/Docket?ProjectID=41025</a>

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