



# Aviation Investigation Final Report

<b>Location:</b>	VANCOUVER, Washington	<b>Accident Number:</b>	SEA93LA126
<b>Date &amp; Time:</b>	May 28, 1993, 15:25 Local	<b>Registration:</b>	N43387
<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 - Personal		

## Analysis

THE PILOT, WHO HAD LIMITED EXPERIENCE IN TAILWHEEL AIRCRAFT, WAS ATTEMPTING TO LAND IN A STRONG, GUSTY CROSSWIND. HE LOST CONTROL OF THE AIRCRAFT DURING THE FLARE/TOUCHDOWN, AND HIS REMEDIAL ACTIONS WERE INADEQUATE TO BRING THE AIRCRAFT BACK UNDER CONTROL. WHILE HE WAS ATTEMPTING TO REGAIN CONTROL, THE AIRCRAFT NOSED OVER.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADEQUATE REMEDIAL ACTION. FACTORS INCLUDE CROSSWINDS, GUSTS, AND THE PILOT'S LACK OF TOTAL EXPERIENCE IN TAILWHEEL TYPE AIRCRAFT.

## Findings

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

### Findings

1. (C) REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND
  2. (F) WEATHER CONDITION - CROSSWIND
  3. (F) WEATHER CONDITION - GUSTS
  4. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND
-

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

## Factual Information

On May 28, 1993, at approximately 1525 Pacific daylight time (PDT), a Taylorcraft BC-12D, N43387, flipped over during the landing roll at Evergreen Field, Vancouver, Washington. The FAA certificated flight instructor, who was the sole occupant of the aircraft, was not injured, but the aircraft sustained substantial damage. The local pleasure flight, which began about 1420 PDT, was in visual meteorological conditions at the time of the accident. No flight plan had been filed, and there was no report of an ELT activation.

The pilot, who said he had 1.2 hours of pilot in command time in tailwheel aircraft, was attempting to land in a strong, gusty, crosswind. During the flare/touchdown he lost control of the aircraft, and his remedial action was not adequate to recover. During the attempt to regain control, the aircraft nosed over.

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	24, 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>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical—no waivers/lim.	<b>Last FAA Medical Exam:</b>	March 5, 1993
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	324 hours (Total, all aircraft), 4 hours (Total, this make and model), 225 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	TAYLORCRAFT	<b>Registration:</b>	N43387
<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>	7046
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	April 7, 1993 100 hour	<b>Certified Max Gross Wt.:</b>	1200 lbs
<b>Time Since Last Inspection:</b>	67 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5884 Hrs	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	A-65
<b>Registered Owner:</b>	EVERGREEN FLYING SERVICE	<b>Rated Power:</b>	65 Horsepower
<b>Operator:</b>	EVERGREEN FLYING SERVICE	<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>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown / 4300 ft AGL	<b>Visibility</b>	30 miles
<b>Lowest Ceiling:</b>	Broken / 4300 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots / 20 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	230°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	20°C / 12°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(59S)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(59S)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	14:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	EVERGREEN FIELD 59S	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	320 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	28	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2600 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## 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>	45.63079,-122.520225(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Anderson, Orrin
<b>Additional Participating Persons:</b>	GEORGE DIMARTINI; PORTLAND , OR
<b>Original Publish Date:</b>	May 17, 1994
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=41715">https://data.ntsb.gov/Docket?ProjectID=41715</a>

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](#).