



# Aviation Investigation Final Report

<b>Location:</b>	SILVERDALE, Washington	<b>Accident Number:</b>	SEA00LA060
<b>Date &amp; Time:</b>	April 1, 2000, 16:00 Local	<b>Registration:</b>	N2635K
<b>Aircraft:</b>	Cessna 180K	<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

The pilot was landing the tailwheel aircraft in gusty winds that were shifting direction. He touched down on the main gear with a headwind, but as he lowered the tail to the runway surface, the aircraft was hit with a crosswind that caused it to swerve toward the side of the runway. Although the pilot attempted to realign the aircraft with the runway, it departed the left side of the runway and impacted an earthen berm. Upon contacting the berm, both main gear collapsed.

## 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 winds. Factors include gusty, shifting winds, crosswinds, and an earthen berm near the edge of the runway.

## Findings

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

### Findings

1. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
  2. (F) WEATHER CONDITION - UNFAVORABLE WIND
  3. (F) WEATHER CONDITION - GUSTS
  4. (F) WEATHER CONDITION - CROSSWIND
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Occurrence #2: GEAR COLLAPSED  
Phase of Operation: LANDING - ROLL

Findings

5. (F) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - BERM
6. LANDING GEAR,MAIN GEAR - OVERLOAD

## Factual Information

On April 1, 2000, approximately 1600 Pacific standard time, a Cessna 180K, N2635K, experienced a gear collapse during the landing roll at Apex Airpark, Silverdale, Washington. The private pilot and his passenger were not injured, but the aircraft, which was owned and operated by the pilot, sustained substantial damage. The 14 CFR Part 91 personal pleasure flight, which departed Roche Harbor Airport, Roche Harbor, Washington, about 45 minutes earlier, was being operated in visual meteorological conditions. No flight plan had been filed, and the ELT, which was activated by the impact, was turned off at the scene.

According to the pilot, he was landing in strong, variable, gusty winds at a location where he had landed many times before. He touched down on the main gear with a headwind, and kept the tailwheel elevated while he allowed the aircraft to slow. Then, just as he began to lower the tailwheel to the runway, a strong wind gust hit the aircraft from the side and it began to track toward the left edge of the runway. The pilot applied opposite rudder and opposite brake, but he could not keep the aircraft from departing the left side of the runway. Soon after departing the runway surface, both of the main gear impacted an earthen berm and folded back underneath the belly of the aircraft. The pilot said that there was nothing wrong with the aircraft or its systems, but that it just got away from him when the crosswind gust hit the aircraft during the transition from a two-point to a three-point position.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	56, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea	<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--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	October 23, 1998
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	403 hours (Total, all aircraft), 183 hours (Total, this make and model), 291 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N2635K
<b>Model/Series:</b>	180K 180K	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18053020
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	February 3, 2000 Annual	<b>Certified Max Gross Wt.:</b>	2800 lbs
<b>Time Since Last Inspection:</b>	12 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4669 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-470-U
<b>Registered Owner:</b>	REED E. HANSEN	<b>Rated Power:</b>	230 Horsepower
<b>Operator:</b>		<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>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots / 15 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	290°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	ROCHE HARBOR , WA (9SL )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(S42 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:15 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	APEX AIRPARK S42	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	525 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	35	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2500 ft / 35 ft	<b>VFR Approach/Landing:</b>	Full stop

## 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>	47.669616,-122.7191 (est)

## Administrative Information

**Investigator In Charge (IIC):** Anderson, Orrin

**Additional Participating Persons:** OVE LARSEN;

**Original Publish Date:** May 9, 2001

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=51320>

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