

# **Aviation Investigation Final Report**

Location: North Bend, Washington Accident Number: SEA04LA075

Date & Time: April 29, 2004, 10:30 Local Registration: N7631K

Aircraft: Piper PA-20 Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

The pilot reported that while in flight, he heard a "flapping sound" and since he was near an airstrip, he decided to land to check the aircraft. The pilot stated that when he was abeam the windsock, which is located near mid-field, he noted that the sock was limp. Since he was already on the downwind for runway 26, he continued in the pattern for landing. The pilot reported that the aircraft was a little high on final approach, so he slipped the aircraft to attain the correct altitude. Just prior to touchdown, the pilot felt a tailwind gust which pushed the aircraft. The pilot continued the landing and the aircraft touched down about one-third of the way down the airstrip. The aircraft rolled for a short distance then became airborne again, subsequently touching down about three-quarters of the way down the airstrip. During the landing roll, the pilot stated that, "...a combination of rough field, tailwind, and braking led to the tail coming up past the point of no return, and on her back we went..." The aircraft then nosed over and came to rest inverted. The wind gusts were reported by the pilot as from the east, with gusts of 8 to 12 knots.

### **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 aircraft control during the landing roll. A rough landing surface and tailwind gusts were factors.

### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

#### Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

2. (F) WEATHER CONDITION - GUSTS

3. (F) WEATHER CONDITION - TAILWIND

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Occurrence #2: NOSE OVER

Phase of Operation: LANDING - ROLL

#### Findings

4. (F) TERRAIN CONDITION - ROUGH/UNEVEN

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#### **Factual Information**

On April 29, 2004, about 1030 Pacific daylight time, a Piper PA-20, N7631K, registered to and operated by the pilot as a 14 CFR Part 91 personal flight, nosed over during the landing roll at Bandera State airstrip, located 11 nautical miles east of North Bend, Washington. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft was substantially damaged and the commercial pilot, the sole occupant, was not injured. The flight originated from Renton, Washington, about 30 minutes prior to the accident.

During a telephone interview and subsequent written statement, the pilot reported that while in flight, he heard a "flapping sound" and since he was near Bandera State, he decided to land to check the aircraft. The pilot stated that when he was abeam the windsock, which is located near mid-field, he noted that the sock was limp. Since he was already on the downwind for runway 26, he continued in the pattern for landing. The pilot reported that the aircraft was a little high on final approach, so he slipped the aircraft to attain the correct altitude. Just prior to touchdown, the pilot felt a tailwind gust which pushed the aircraft. The pilot continued the landing and the aircraft touched down about one-third of the way down the airstrip. The aircraft rolled for a short distance then became airborne again, subsequently touching down about three-quarters of the way down the airstrip. During the landing roll, the pilot stated that, "...a combination of rough field, tailwind, and braking led to the tail coming up past the point of no return, and on her back we went..." The aircraft then nosed over and came to rest inverted.

After the accident, the pilot noted that the winds were mostly light, "...except for the occasional extended gusts of 8-12 knots out of the east."

Bandera State airstrip is 2,344 feet long by 100 feet wide and turf covered. Runway alignment is 08-26. The strip is owned and maintained by Washington State Department of Transportation. A representative of Washington State Aviation Division reported that the airstrip was still closed for the winter. One windsock is located at about mid-field.

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### **Pilot Information**

Certificate:	Commercial	Age:	45,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	May 29, 2003
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 21, 2004
Flight Time:	616 hours (Total, all aircraft), 235 hours (Total, this make and model), 501 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7631K
Model/Series:	PA-20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20-450
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	March 31, 2004 Annual	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:	3 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6102 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-A3A
Registered Owner:	Brian S. Cole	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None

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## 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:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/ 12 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	18°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Renton, WA (RNT)	Type of Flight Plan Filed:	None
Destination:	North Bend, WA (4W0)	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	Bandera State 4W0	Runway Surface Type:	Grass/turf
Airport Elevation:	1636 ft msl	<b>Runway Surface Condition:</b>	Dry;Rough
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	2344 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	47.383335,-122.538612

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#### **Administrative Information**

Investigator In Charge (IIC): Eckrote, Debra

Additional Participating Persons: Ove S Larsen; FAA-FSDO; Renton, WA

Original Publish Date: September 1, 2004

Last Revision Date: Investigation Class: Class

Note: Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=59143

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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.

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