



# Aviation Investigation Final Report

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<b>Location:</b>	Palouse, Washington	<b>Accident Number:</b>	SEA04LA057
<b>Date &amp; Time:</b>	March 25, 2004, 08:30 Local	<b>Registration:</b>	N731YZ
<b>Aircraft:</b>	Cessna A188B	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

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## Analysis

The pilot departed runway 22 with a light quartering tailwind from a private airstrip in an area where the terrain was comprised of gently rolling hills. Unable to climb, the pilot started a gradual turn to the right to avoid rising terrain, and at the same time opened the dump gate to lighten his load. The airplane touched down on a hill at the end of the runway, bounced back into the air and landed going up the next hill at the end of the runway. The airplane then ground looped damaging its right wing. A 0753, a weather reporting facility located 7 nautical miles south of the accident site reported wind 080 degrees at 14 knots. At 0853, the same weather reporting facility reported wind 100 degrees at 17 knots. The pilot reported no mechanical failures or malfunctions with the aircraft 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 decision to takeoff downwind resulting in his inability to achieve a positive climb rate and an in-flight collision with terrain. Factors contributing to the accident included the rising terrain and the tailwind condition.

### Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
2. (F) TERRAIN CONDITION - RISING
3. (C) CLIMB - NOT ATTAINED - PILOT IN COMMAND
4. (F) WEATHER CONDITION - TAILWIND

## Factual Information

On March 25, 2004, approximately 0830 Pacific standard time, a Cessna A188B agricultural aircraft, N731YZ, was substantially damaged after impacting terrain following takeoff from a private airstrip near Palouse, Washington. The flight was operating in accordance with 14 CFR Part 137, and a flight plan was not filed. Visual meteorological conditions prevailed at the time of the accident, and the commercial pilot was not injured. The local aerial application flight was originating at the time of the accident.

In a telephone interview with the NTSB investigator-in-charge (IIC), and according to the Pilot/Operator Aircraft Accident Report (NTSB Form 6120,1/2), the pilot reported that he departed runway 22 from a private dirt airstrip which was in an area where the terrain was dominated with gently rolling hills. The pilot stated that he took off with a light quartering tail wind, but was unable to climb out at the end of the runway. The pilot further stated that he started a gradual turn to the right to avoid rising terrain, and at the same time opened the dump gate to lighten his load. The pilot related that still unable to climb, the airplane touched down on a hill at the end of the runway, bounced back into the air and landed going up the next hill at the end of the runway. The pilot reported that the right main [landing] gear was broken, which caused the airplane to ground loop, damaging the right wing.

At 0753, the weather reporting facility at the Pullman/Moscow Regional Airport, located approximately 7 nautical miles south of the accident site, reported wind 080 degrees at 14 knots. At 0853, the same weather facility reported wind 100 degrees at 17 knots.

The pilot reported no mechanical failures or malfunctions with the aircraft at the time of the accident.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	27, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Center
<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 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	March 2, 2004
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	March 6, 2004
<b>Flight Time:</b>	1153 hours (Total, all aircraft), 60 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N731YZ
<b>Model/Series:</b>	A188B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	18803274T
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	4200 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>		<b>Engine Model/Series:</b>	IO-520
<b>Registered Owner:</b>	Dale E. Schoepflin	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>	DALES FLYING SERVICE INC	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	DF7G

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PUW,2555 ft msl	<b>Distance from Accident Site:</b>	7 Nautical Miles
<b>Observation Time:</b>	08:53 Local	<b>Direction from Accident Site:</b>	190°
<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>	17 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	100°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.9 inches Hg	<b>Temperature/Dew Point:</b>	8°C / 173°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Palouse, WA	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	08:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	Dirt
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	22	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2300 ft / 50 ft	<b>VFR Approach/Landing:</b>	None

## 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>	46.886112,-117.093887

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Little, Thomas
<b>Additional Participating Persons:</b>	John H Phillips; Federal Aviation Administration; Spokane, WA
<b>Original Publish Date:</b>	June 30, 2004
<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=58952">https://data.nts.gov/Docket?ProjectID=58952</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](#).