





# **Aviation Investigation Final Report**

Location: LONE PINE, Oregon Accident Number: SEA00LA140

Date & Time: July 21, 2000, 07:50 Local Registration: N731GR

Aircraft: Cessna 188 Aircraft Damage: Substantial

**Defining Event:** 1 Minor

Flight Conducted Under: Part 137: Agricultural

### **Analysis**

During an aerial application run, the aircraft's engine experienced a complete loss of power, and the pilot elected to make a forced landing in an adjacent alfalfa field. Although the touchdown was successful, the aircraft was damaged during a pilot-executed ground loop, which was initiated in order to stop the aircraft before it collided with an irrigation system that was present in the field.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The complete loss of engine power for undetermined reasons. Factors include an irrigation system in the field where the forced landing took place, and the pilot's intentional initiation of a ground loop in order to miss the pipes of the irrigation system.

### **Findings**

Occurrence #1: LOSS OF ENGINE POWER Phase of Operation: MANEUVERING

**Findings** 

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

- Findings
  2. (F) GROUND LOOP/SWERVE INTENTIONAL PILOT IN COMMAND
  3. (F) OBJECT OTHER

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### **Factual Information**

On July 21, 2000, approximately 0750 Pacific daylight time, a Cessna 188, N731GR, collided with the terrain during an intentional ground loop initiated by the pilot during a forced landing in an alfalfa field near Lone Pine, Oregon. The commercial pilot, who was the sole occupant, received minor injuries, and the aircraft, which was owned and operated by Precision Application, of Madras, Oregon, sustained substantial damage. The 14 CFR Part 137 aerial application flight, which had been in the air about 15 minutes, was operating in visual meteorological conditions. No flight plan had been filed, and the aircraft did not carry an ELT.

According to the pilot, while making a chemical application run, the aircraft's engine quit, and he executed a forced landing in an adjacent field of alfalfa. Although the touchdown was successful, the pilot found it necessary to execute an intentional ground loop in order to stop the aircraft prior to encountering an irrigation system in the field where he landed. During the ground loop, the aircrafts empennage sustained substantial damage.

No engine anomalies or malfunctions that would have lead to the loss of power were discovered.

#### **Pilot Information**

Certificate:	Commercial	Age:	53,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
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 Medicalno waivers/lim.	Last FAA Medical Exam:	March 28, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	7100 hours (Total, all aircraft), 2000 hours (Total, this make and model)		

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## **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N731GR
Model/Series:	188 188	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	02889T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:	50 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	10-520
Registered Owner:	PAUL H. JENSEN	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:	PRECESSION APPLICATION	Operator Designator Code:	NMVG

# 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	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ition	
Departure Point:	PRINEVILLE , OR (NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	07:35 Local	Type of Airspace:	Class G

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# **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	44.100658,-120.659721(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Anderson, Orrin	
Additional Participating Persons:	JOHNNY MILLER;	
Original Publish Date:	March 2, 2001	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:	The NTSB traveled to the scene of this accident.	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=49797	

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.

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