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:		**Injuries:**	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

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

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 Medical--no 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)		

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:**	IO-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:**	
Lowest Cloud Condition:	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 Precipitation		
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

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
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)

Administrative Information

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