



Aviation Investigation Final Report

Location:	ST. IGNATIUS, Montana	Accident Number:	DEN87LA119
Date & Time:	May 6, 1987, 10:15 Local	Registration:	N9282R
Aircraft:	CESSNA A188B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

AN AG PLT WAS SPRAYING A FIELD NEAR THE LOCAL ARPT, AT 100 FEET AGL. DURING AN AERIAL APPLICATION MANEUVER, THE ENGINE MADE A LOUD BANG AND STOPPED. THE PLT LEVELED THE ACFT, SELECTED A LANDING SITE AND LANDED. DURING THE ROLL OUT, THE ACFT CROSSED AN IRRIGATION DITCH AND HIT A FENCE. THE LEFT GEAR WAS REMOVED BY A FENCE POST AND THE ACFT SKIDDED, RIGHT WING FIRST, TO A STOP. A POST CRASH INSPECTION OF THE ENGINE SHOWED A FAILURE OF THE CRANKSHAFT. A SERVICE BULLETIN ISSUED IN FEBRUARY, 1987, WARNED OF SOME PREVIOUS FAILURES OF CRANKSHAFTS IN THIS ENGINE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (C) ENGINE ASSEMBLY,CRANKSHAFT - BRITTLE FRACTURE

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

2. (F) TERRAIN CONDITION - HIDDEN OBSTRUCTION(S)

3. (F) TERRAIN CONDITION - DITCH

Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

4. (F) OBJECT - FENCE

Factual Information

Pilot Information

Certificate:	Commercial	Age:	34, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
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:	May 8, 1986
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2342 hours (Total, all aircraft), 1495 hours (Total, this make and model), 2240 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N9282R
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18802210T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 1, 1987 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:	14 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2432 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520
Registered Owner:	COOPER DARYL V	Rated Power:	300 Horsepower
Operator:	DARYL V. COOPER	Operating Certificate(s) Held:	
Operator Does Business As:	D. B. COOPER FLIGHT ENTER.	Operator Designator Code:	

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	30 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:	13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	RONAN, MT (7SO)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Grass/turf
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

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:	47.320198,-114.02095(est)

Administrative Information

Investigator In Charge (IIC): Collins, Robert

Additional Participating Persons: LEO WADEKAMP; HELENA , MT

Original Publish Date: August 31, 1988

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=17220>

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](#).