



Aviation Investigation Final Report

Location:	OPHEIM, Montana	Accident Number:	DEN84LA181
Date & Time:	June 19, 1984, 10:00 Local	Registration:	N731GL
Aircraft:	CESSNA A188B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE ACFT WAS DAMAGED IN A FORCED LANDING AFTER THE ENGINE QUIT. THE PLT SAID THAT SEVERAL WEEKS PRIOR TO THE ACCIDENT HEDISCOVERED THE FUEL CROSSOVER QUICK DRAIN WAS 'FROZEN' SHUT AND WOULD NOT DRAIN. HE REMOVED THE DRAIN TO LUBRICATE IT AND UPON REINSTALLATION HE COULD NOT PROPERLY SAFETY WIRE IT DUE LACK OF ACCESS. HE WIRED IT TO AN ADJACENT SCREW. AFTERTHE ACCIDENT THE SCREW, WIRE AND DRAIN WERE MISSING. HE STATED THAT IT WAS 'POSSIBLE' THAT HE DID NOT RETIGHTEN THE SCREW. THE PLT SAID THE ACFT HAD 21 GALLONS OF FUEL FOR THIS FLT WHICH LASTED 45 MINUTES. THE ACFT, ACCORDING TO THE PLT, BURNS ABOUT 15.5 GALS/HR.

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: CRUISE - NORMAL

Findings

1. (C) FUEL SYSTEM,DRAIN - SEPARATION
2. (C) MAINTENANCE,INSTALLATION - INADEQUATE - PILOT IN COMMAND

- 3. (F) FLUID,FUEL - EXHAUSTION
- 4. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Commercial	Age:	59, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 11, 1984
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3500 hours (Total, all aircraft), 2500 hours (Total, this make and model), 3500 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N731GL
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18802884T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	4200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	899 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520-D
Registered Owner:	FRANK REDFIELD	Rated Power:	310 Horsepower
Operator:	FRANK REDFIELD	Operating Certificate(s) Held:	
Operator Does Business As:		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	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	2 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	295°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	22°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	09:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	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:	48.870357,-106.559684(est)

Administrative Information

Investigator In Charge (IIC): Winningham, Fred

**Additional Participating
Persons:**

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=16402>

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](#).