



Aviation Investigation Final Report

Location:	TABLE ROCK, Nebraska	Accident Number:	MKC89LA114
Date & Time:	May 25, 1989, 20:00 Local	Registration:	N9084R
Aircraft:	CESSNA 188	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE PLT SAID THAT HE WAS COMPLETING AN AERIAL APPLICATION OPERATION WHEN THE ENGINE FAILED. AN EMERGENCY LANDING WAS ATTEMPTED ON ROUGH TERRAIN WHICH RESULTED IN SUBSTANTIAL DAMAGE TO THE ACFT. POST ACCIDENT INVESTIGATION REVEALED CATASTROPHIC FAILURE OF THE INTERNAL ENGINE COMPONENTS DUE TO OIL STARVATION. THE REASON FOR THE OIL STARVATION COULD NOT BE DETERMINED DUE TO THE EXTENT OF THE INTERNAL DAMAGE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE CATASTROPHIC FAILURE OF THE INTERNAL ENGINE COMPONENTS DUE TO OIL STARVATION. CONTRIBUTING TO THE SEVERITY OF THE ACCIDENT WAS THE ROUGH TERRAIN THE PILOT WAS FORCED TO LAND ON.

Findings

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

Findings

1. (C) FLUID,OIL - STARVATION
2. POWERPLANT - DISINTEGRATED

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

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

Findings

3. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

Pilot Information

Certificate:	Commercial	Age:	54, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 27, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	17260 hours (Total, all aircraft), 10000 hours (Total, this make and model), 25 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N9084R
Model/Series:	188 188	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18802105T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 24, 1989 Annual	Certified Max Gross Wt.:	4400 lbs
Time Since Last Inspection:	9 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1848 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520-D23
Registered Owner:	THOMAS, CHARLES I.	Rated Power:	300 Horsepower
Operator:		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	15 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:	21°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LIBERTY , NE (NE57)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	19:30 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Grass/turf
Airport Elevation:	1300 ft msl	Runway Surface Condition:	Dry
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:	40.169364,-96.080467(est)

Administrative Information

Investigator In Charge (IIC): Hruban, John

Additional Participating Persons: DAN UNDERWOOD;

Original Publish Date: May 22, 1990

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=34793>

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](#).