



Aviation Investigation Final Report

Location:	ROSEAU, Minnesota	Accident Number:	MKC89LA091
Date & Time:	April 15, 1989, 10:00 Local	Registration:	N23702
Aircraft:	AIR TRACTOR AT-301	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PLT SAID THAT SHORTLY AFTER TAKEOFF AND REACHING AN ALTITUDE OF ABOUT 500 FT AGL, THE ENGINE QUIT. HE SAID HE WAS ABLE TO GET SEVERAL SHORT BURSTS OF POWER BY OPERATING THE HAND FUEL PUMP, BUT WAS UNABLE TO SUSTAIN ENGINE POWER. AN EMERGENCY LDG WAS ATTEMPTED IN A SWAMP AREA WHICH RESULTED IN THE ACFT NOSING OVER. THE PLT FELT THERE WAS A POSSIBILITY OF ICE IN THE FUEL LINES DUE TO THE EXISTING SUB-FREEZING TEMPERATURE. THE PLANE WAS BEING FLOWN TO ANOTHER APT FOR AN ANNUAL INSPECTION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FUEL STARVATION DUE TO FUEL ICE.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) FUEL SYSTEM - ICE
2. (C) FLUID,FUEL - STARVATION
3. (F) WEATHER CONDITION - TEMPERATURE EXTREMES

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

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

Findings

4. (F) TERRAIN CONDITION - NONE SUITABLE

Occurrence #4: NOSE OVER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Commercial	Age:	63, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
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--w/ waivers/lim	Last FAA Medical Exam:	May 4, 1988
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	26671 hours (Total, all aircraft), 1250 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR	Registration:	N23702
Model/Series:	AT-301 AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0419
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	May 1, 1988 Annual	Certified Max Gross Wt.:	5000 lbs
Time Since Last Inspection:	150 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1290 Hrs	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R-1340-AN1
Registered Owner:	LEON F. SCHULTZ	Rated Power:	600 Horsepower
Operator:		Operating Certificate(s) Held:	None
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:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-1°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ROSEAU , MN (ROX)	Type of Flight Plan Filed:	None
Destination:	THIEF RIVER FLS, MN (TRF)	Type of Clearance:	None
Departure Time:	09:55 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:	48.840328,-95.760055(est)

Administrative Information

Investigator In Charge (IIC): Hruban, John

Additional Participating Persons: BILL JOHNSON;

Original Publish Date: January 31, 1991

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=34778>

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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](#).