



# **Aviation Investigation Final Report**

Location: GREENBUSH, Minnesota Accident Number: CHI82DA208

Date & Time: June 14, 1982, 08:15 Local Registration: N4870R

Aircraft: CESSNA A188B Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 137: Agricultural

#### **Analysis**

THE AIRCRAFT CRASHED DURING TAKEOFF FROM A GRASS RUNWAY THAT HAD NOT BEEN MOWED FOR SEVERAL WEEKS. THE FIELD ELEVATION WAS 1070 FT, THE WIND WAS CALM, AND THE TEMPERATURE AND DEW POINT WERE 62 AND 50 DEGREES. A FULL FLAP (20 DEGREE) CONFIGURATION WAS USED FOR TAKEOFF. HOWEVER, THE CHECK LIST RECOMMENED 5 TO 10 DEGREES OF FLAPS FOR RESTRICTD CATEGORY AG TRUCKS WITH DISPERSAL EQUIPMENT INSTALLED. THE GROSS WEIGHT OF THE AIRCRAFT WAS ESTIMATED TO BE 291 LBS OVER THE MAXIMUM LIMIT. THE PILOT REPORTED THAT AFTER LIFT-OFF THE PLANE BEGAN TO SETTLE. AS HE NEARED THE END OF THE RUNWAY, HE DUMPED THE LOAD. HOWEVER, THE PLANE CONTINUED TO SETTLE AND STRUCK A DITCH ABOUT 50 YDS BEYOND THE END OF THE RUNWAY.

#### **Probable Cause and Findings**

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

#### **Findings**

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) AIRCRAFT WEIGHT AND BALANCE - IMPROPER - PILOT IN COMMAND

- 2. (C) PREFLIGHT PLANNING/PREPARATION INADEQUATE PILOT IN COMMAND
- 3. (F) LOWERING OF FLAPS IMPROPER PILOT IN COMMAND
- 4. (F) TERRAIN CONDITION HIGH VEGETATION
- 5. (C) AIRSPEED NOT OBTAINED PILOT IN COMMAND
- 6. (C) STALL/MUSH INADVERTENT PILOT IN COMMAND
- 7. (F) TERRAIN CONDITION DITCH

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## **Factual Information**

#### **Pilot Information**

Certificate:	Commercial	Age:	35,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	November 10, 1981
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	5180 hours (Total, all aircraft), 120 hours (Total, this make and model), 5100 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

### **Aircraft and Owner/Operator Information**

Aircraft Make:	CESSNA	Registration:	N4870R
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	18802239T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	4200 lbs
Time Since Last Inspection:	0 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1099 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	IO-520-D-23
Registered Owner:	LEON SCHULTZ	Rated Power:	285 Horsepower
Operator:	LEON SCHULTZ AIR SPRAY SERVICE	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

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### 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:	
<b>Lowest Cloud Condition:</b>	Scattered / 20	000 ft AGL	Visibility	15 miles
Lowest Ceiling:	Unknown		Visibility (RVR):	
Wind Speed/Gusts:	/		Turbulence Type Forecast/Actual:	/
Wind Direction:	0°		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg		Temperature/Dew Point:	62°C
Precipitation and Obscuration:	No Obscuratio	n; No Precipita	tion	
Departure Point:	GREENBUSH	, MN (02Y)	Type of Flight Plan Filed:	None
Destination:	GREENBUSH	, MN (02Y)	Type of Clearance:	None
Departure Time:	08:15 Local		Type of Airspace:	

### **Airport Information**

Airport:	GREENBUSH 02Y	Runway Surface Type:	Grass/turf
Airport Elevation:	0 ft msl	<b>Runway Surface Condition:</b>	Wet
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	2650 ft / 200 ft	VFR Approach/Landing:	None

### 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:	

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#### **Administrative Information**

Investigator In Charge (IIC):

**Additional Participating** 

Persons:

Original Publish Date: June 14, 1983

**Last Revision Date:** 

Investigation Class: Class

Note:

Investigation Docket: <a href="https://data.ntsb.gov/Docket?ProjectID=70898">https://data.ntsb.gov/Docket?ProjectID=70898</a>

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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.

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