



National Transportation Safety Board Aviation Accident Final Report

Location:	BELDING, MI	Accident Number:	CHI89DEM01
Date & Time:	06/02/1989, 2052 EDT	Registration:	N5658J
Aircraft:	CESSNA 188A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE PILOT STATED THAT HE WAS ATTEMPTING TO DEPART FROM A 2,000 FOOT LONG SOD STRIP WITH A LOAD OF MALATHION FOR AGRICULTURAL APPLICATION. HE REPORTED THAT THE AIRCRAFT ENCOUNTERED A SOGGY PORTION OF THE AIRSTRIP AND FAILED TO ACCELERATE TO ROTATION SPEED. THE AIRCRAFT RAN OFF THE DEPARTURE END OF THE RUNWAY, AND STRUCK A SMALL TREE BEFORE IT IMPACTED A DIRT BANK AND CAME TO A STOP.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S POOR PREFLIGHT ASSESSMENT OF THE RUNWAY CONDITION/AIRCRAFT PERFORMANCE CAPABILITIES, AND THE AIRCRAFT'S RESULTANT FAILURE TO ATTAIN FLYING SPEED. SOFT TERRAIN IS A FACTOR IN THE ACCIDENT.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. TERRAIN CONDITION - GRASS
2. (C) PREFLIGHT PLANNING/PREPARATION - POOR - PILOT IN COMMAND
3. (F) TERRAIN CONDITION - SOFT
4. (C) LIFT-OFF - NOT ATTAINED - PILOT IN COMMAND
5. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

Factual Information

Pilot Information

Certificate:	Commercial	Age:	46, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Expired	Last FAA Medical Exam:	06/14/1982
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N5658J
Model/Series:	188A 188A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	18800608
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	05/26/1989, Annual	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:	5 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2651 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	O-470-R
Registered Owner:	STUDER, ALFRED C	Rated Power:	230 hp
Operator:	STUDER, AFLRED	Operating Certificate(s) Held:	
Operator Does Business As:	AL'S FLYING SERVICE	Operator Designator Code:	STUG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	GRR, 794 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	2050 EDT	Direction from Accident Site:	52°
Lowest Cloud Condition:	Scattered / 25000 ft agl	Visibility	20 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	18° C / 12° C
Precipitation and Obscuration:			
Departure Point:	BELDING, MI (NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	2052 EDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	WILLIAM M NAYMICK	Report Date:	06/30/1992
Additional Participating Persons:	PAUL V HASEN		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).