



Aviation Investigation Final Report

Location: WARREN, Minnesota Accident Number: CHI83LA153

Date & Time: March 28, 1983, 17:15 Local Registration: N1170G

Aircraft: MOONEY M20J Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

THE PILOT WAS PRACTICING A SHORT FIELD TAKEOFF. THE ACFT CAME OFF THE GROUND NOSE HIGH AT LOW AIRSPEED. AT ABOUT 40 FEETAGL THE PILOT RETRACTED THE LANDING GEAR AND WHILE DOING THIS HE INADVERTANTLY RAISED THE FLAPS. THE ACFT MUSHED BACK TOTHE SURFACE. THE ACFT LEFT WING WAS DAMAGED BY THE GROUND IMPACT. THE WEATHER WAS VMC, NO FLIGHT PLAN HAD BEEN FILED ANDTHE PILOT WAS NOT INJURED. THE FLIGHT HAD ORIGINATED ABOUT 3 HOURS PRIOR TO THE ACCIDENT AS A TRAINING FLIGHT FROM THE U. OF NORTH DAKOTA. THE PILOT HAD DEPARTED GRAND FORKS AT 1445 CST, FLEW LOCALLY ABOUT 40 MINUTES AND THEN FLEW TO CROOKSTON, ND FOR TOUCH AND GO LANDINGS. HE THEN FLEW TO WARREN TAXIED IN, SHUT DOWN AND VISITED THE TERMINAL. AFTER RESTART AND TAXI, HE DECIDED TO DO THE SHORT/SOFT FIELD TAKEOFF WHICH RESULTED IN THE ACCIDENT.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

- 1. (C) AIRSPEED NOT MAINTAINED PILOT IN COMMAND
- 2. (C) RAISING OF FLAPS PREMATURE PILOT IN COMMAND
- 3. (F) STALL/MUSH NOT CORRECTED PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - INITIAL CLIMB

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Factual Information

Pilot Information

Certificate:	Private	Age:	20,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	September 11, 1981
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	182 hours (Total, all aircraft), 7 hours (Total, this make and model), 79 hours (Pilot In Command, all aircraft), 56 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N1170G
Model/Series:	M20J M20J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-1315
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	November 15, 1982 Annual	Certified Max Gross Wt.:	1640 lbs
Time Since Last Inspection:	68 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	459 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated	Engine Model/Series:	IO-360-A3B6D
Registered Owner:	UNIVERSITY OF NORTH DAKOTA	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None
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:	
Lowest Cloud Condition:	Scattered	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	1	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Prec	pitation	
Departure Point:	CROOKSTON , MN (CR	N Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	WARREN MUNICIPAL D37	Runway Surface Type:	Asphalt
Airport Elevation:	880 ft msl	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	
Runway Length/Width:	3200 ft / 75 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):	Mcavoy, E
Additional Participating Persons:	
Original Publish Date:	
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=12122

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.

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