



National Transportation Safety Board Aviation Accident Final Report

Location:	RUSH CITY, MN	Accident Number:	CHI95FA114
Date & Time:	04/02/1995, 1208 CDT	Registration:	N56349
Aircraft:	MAULE M-5-235C	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

A WITNESS REPORTED THAT SHE OBSERVED THE AIRPLANE AS IT ENTERED THE TRAFFIC PATTERN. SHE DESCRIBED THE AIRPLANE BOUNCING AND ROLLING, AND THAT IT 'WOBBLED' FROM SIDE TO SIDE, THEN DESCEND ABRUPTLY TOWARD THE GROUND. THE AIRPORT MANAGER ESTIMATED THE WINDS WERE 'FROM THE SOUTHEAST AND GUSTING TO ABOUT THIRTY KNOTS.' EXAMINATION OF THE WRECKAGE REVEALED NO EVIDENCE OF PREIMPACT MALFUNCTION. THE PILOT HAD BEEN ISSUED A PRIVATE PILOT CERTIFICATE 7 MONTHS PRIOR TO THE ACCIDENT. AT THE TIME OF APPLICATION THE PILOT LISTED 64.7 TOTAL FLIGHT HOURS. TOXICOLOGICAL TESTS REVEALED 0.021 UG/ML CHLORPHENIRAMINE AND 0.098 UG/ML DIPHENHYDRAMINE IN THE BLOOD SPECIMEN. THERAPEUTIC LEVELS ARE 0.016-0.070 AND 0.100 RESPECTIVELY. CHLORPHENIRAMINE AND DIPHENHYDRAMINE ARE ACTIVE INGREDIENTS IN MANY NONPRESCRIPTION COLD AND ALLERGY MEDICATIONS, AND CAN CAUSE DROWSINESS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S POOR JUDGMENT IN ATTEMPTING TO LAND IN THE EXISTING WIND CONDITIONS. HIS LACK OF EXPERIENCE WAS A FACTOR.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: LANDING

Findings

1. (C) WEATHER CONDITION - HIGH WIND
2. (C) JUDGMENT - POOR - PILOT IN COMMAND
3. (F) LACK OF EXPERIENCE - PILOT IN COMMAND
4. USE OF INAPPROPRIATE MEDICATION/DRUG - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING

Factual Information

HISTORY OF FLIGHT

On April 2, 1995, at 1208 central daylight time, a Maule M-5- 235C, N56349, operated by Robert W. Meyers, was destroyed when it impacted the terrain while landing at the Rush City Municipal Airport, Rush City, Minnesota. The private pilot sustained fatal injuries. The personal flight originated in St. Paul, Minnesota, and was conducted under 14 CFR Part 91 in visual meteorological conditions. No flight plan was filed.

A witness reported that she observed the accident airplane as it entered the traffic pattern at the Rush City Municipal Airport. She described the airplane bouncing and rolling and reported that it "wobbled" from side to side then descended abruptly toward the airport.

The airport manager estimated the winds were "from the southeast and gusting to about thirty knots" at the time of the accident.

PERSONNEL INFORMATION

The pilot was issued a private pilot certificate on October 7, 1994, seven months prior to the accident. At the time of application the pilot listed 64.7 total flight hours.

WRECKAGE AND IMPACT INFORMATION

The NTSB on-scene investigation began about 0900 on April 3, 1995. The wreckage was located approximately midfield, 75 yards west of runway 15. The wreckage path was located on a heading of 300 degrees. Two lateral slashes in the soil and windscreen fragments preceded the main impact crater. The crater was approximately twelve inches deep. Impressions of the wing leading edges extended north and south from the main crater. Fragments of a red navigation light were located on the north side of the crater. The main wreckage was located approximately 30 feet beyond the crater on a heading of 160 degrees.

The entire airplane, with the exception of the outer wings, was burned and charred. The leading edges of the wings were compressed at an angle corresponding to a pitch attitude of 135 degrees nose down. The fuselage tubing in the vicinity of the wing carry through exhibited fractured tubing and compression damage. The engine mount and forward fuselage were compressed in the downward direction. Inspection of the airframe, engine controls, and flight control continuity revealed no evidence of preimpact malfunction.

Both blades of the propeller exhibited rotational scoring, torsional bending, and leading edge damage. The tip of one blade was separated. The fragment was discovered in one of the slashes east of the impact crater.

The engine exhibited minor impact damage and burning. Compression was verified in all cylinders and continuity of the accessories was established. The distributor gear in the magneto was melted and the magneto could not be tested. The spark plugs exhibited normal wear. Examination of the carburetor revealed melting to the solder in the brass float and no evidence of malfunction.

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsy of the pilot was conducted April 3, 1995, at the Regina Medical Center, 1175 Nininger Road, Hastings, Minnesota 55033. The results of FAA toxicological testing were negative for all tests conducted except for 0.021 (ug/ml, ug/g) Chlorpheniramine and 0.098 (ug/ml, ug/g)

Diphenhydramine detected in the blood specimen. Chlorpheniramine and Diphenhydramine were detected in the urine specimen.

According to a NTSB National Resource Specialist, the therapeutic level for Diphenhydramine is approximately .100 (ug/ml, ug/g) and the therapeutic level for Chlorpheniramine is .016 to .070 (ug/ml, ug/g). Chlorpheniramine and Diphenhydramine are listed in the Physicians' Desk Reference as active ingredients in many nonprescription cold and allergy medications.

ADDITIONAL DATA/INFORMATION

Following the on-scene portion of the investigation, the wreckage was released to Mr. Howard Hanson, the manager of the Rush City Municipal Airport.

Pilot Information

Certificate:	Private	Age:	49, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	10/08/1993
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	120 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MAULE	Registration:	N56349
Model/Series:	M-5-235C M-5-235C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	7286C
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	O-540-J1A5D
Registered Owner:	ROBERT W. MEYERS	Rated Power:	235 hp
Operator:	ROBERT W. MEYERS	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CBG, 945 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1235 CDT	Direction from Accident Site:	250°
Lowest Cloud Condition:	Scattered / 12000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	15 knots / 30 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	7°C / -6°C
Precipitation and Obscuration:			
Departure Point:	ST. PAUL, MN (21D)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	0000	Type of Airspace:	Class E

Airport Information

Airport:	RUSH CITY MUNICIPAL (54Y)	Runway Surface Type:	Asphalt
Airport Elevation:	923 ft	Runway Surface Condition:	Dry
Runway Used:	15	IFR Approach:	None
Runway Length/Width:	3200 ft / 75 ft	VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	WESLEY M ROBBINS	Report Date:	01/19/1996
Additional Participating Persons:	BRUCE KOTZIAN; MINNEAPOLIS, MN		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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