



National Transportation Safety Board Aviation Accident Factual Report

Location:	HOHENWALD, TN	Accident Number:	ATL94FA012
Date & Time:	11/03/1993, 2135 CST	Registration:	N132MP
Aircraft:	MOONEY M20L	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Business		

HISTORY OF FLIGHT

On November 3, 1993, at 2135 central standard time, a Mooney M20L, N132MP, collided with trees and terrain about two miles south-southeast of the John A. Baker Field in Hohenwald, Tennessee. The private pilot and one passenger were fatally injured. The aircraft was destroyed by impact forces and fire. Night, instrument meteorological conditions existed at the time, and no flight plan was filed for the business flight to Hohenwald. The flight originated in Clarksville, Tennessee, at 2056.

At 1050, on November 3, 1993, a man who identified himself as the pilot of N132MP, called the Jackson, Tennessee Automated Flight Service Station (AFSS) by telephone and obtained a preflight weather briefing for a flight from Hohenwald, Tennessee, to Memphis, Tennessee. He also obtained an outlook briefing for Nashville, Tennessee. At 1128, he called Data Transformation Corporation Direct User Access Terminal System (DUATS), obtained a preflight weather briefing from Hohenwald to Memphis, and filed an instrument flight rules (IFR) flight plan from Hohenwald, Tennessee to Memphis (MEM). Following a flight from Hohenwald to Memphis, a man who identified himself as the pilot of N132MP, called the Jackson AFSS by telephone, and filed an IFR flight plan from Memphis to Clarksville, Tennessee (CKV). At 1617, the pilot of N132MP reported the Clarksville Airport in sight and cancelled his IFR flight plan. At 2056, he contacted Campbell Army Radar Approach Control (RAPCON) by radio, indicated that he had departed Clarksville, and was visual flight rules (VFR) southbound. At that time, N132MP was radar identified. At 2108, Campbell RAPCON terminated radar services for N132MP and advised the pilot of the radio frequency for Memphis Approach Control. No subsequent communications from N132MP were recorded prior to the accident. There was no record of a weather briefing for N132MP after the DUATS briefing at 1128 that morning.

Radar data obtained from Memphis Air Route Traffic Control Center (ARTCC) indicated that N132MP continued to the south toward Hohenwald. The last radar signature for N132MP occurred at 2128, about 3,500 feet mean sea level (msl).

Two local residents were outside at the time of the accident. They reported that a loud "boom" noise was heard, followed by a bright light. One of the witnesses recalled hearing the engine running prior to the accident.

PERSONNEL INFORMATION

Information on the pilot, Mr. William L. Hardison, is included in this report at the section titled "First Pilot Information." The pilot's logbook was partially destroyed by fire, therefore his flight time information was obtained from his latest FAA rating application, dated September 16, 1992.

On September 19, 1992, Mr. Hardison failed the flight portion of his examination for an instrument rating (airplane). The examiner, Mr. Richard Battle, reported that the examination flight was terminated early due to poor performance by Mr. Hardison. Mr. Battle stated that Mr. Hardison "couldn't do anything right," that he could not hold altitude, heading, and basically could not remain oriented. He felt that Mr. Hardison was "stretching his physical abilities." Mr. Hardison seemed tired, and could not "settle down". No instrument approaches were flown, and the flight was terminated early. Mr. Battle failed him on the flight check, and recommended four hours of additional instruction. Mr. Hardison completed the recommended training with another instructor who was working for Mr. Battle, and the flight check was rescheduled with Mr. Battle. On October 1, 1992, the flight check was completed. Mr. Battle recalled that on this attempt, Mr. Hardison performed very well, with almost no trouble at all. He stated that the weather was good on the day of the re-examination, and a complete instrument flight profile was flown. Mr. Battle reported that both flight checks were performed in the Mooney, N132MP.

AIRCRAFT INFORMATION

Information on the aircraft is included in this report at the section titled "Aircraft Information."

METEOROLOGICAL INFORMATION

Weather information for Maury County, Tennessee (MRC), is included in this report at the section titled "Weather Information". There was no weather reporting facility at the James A. Baker Field. In addition to the observation at Maury County, the observation for Jackson, Tennessee (MKL), for 2032 was as follows: Lowest ceiling 500 feet overcast, visibility 3 miles in fog, temperature 52 degrees F, dew point 49 degrees F, altimeter 30.12 inches Hg. MKL is located about 65 miles west of Hohenwald.

A local resident was traveling on Highway 20 west in the direction of Hohenwald about 1930 on the evening of the accident. He stated that the ceilings at the time were very low, and that it was a "bad night to fly." He observed a tower located about 5 miles east of Hohenwald (a height of 380 feet above ground level), and noted that the top beacon was in fog and rain, and was

blurred. He drove to the crash site following the accident, and stated that the weather had not improved during the evening.

WRECKAGE AND IMPACT INFORMATION

The aircraft impacted trees and terrain in a densely wooded area, located about 2 miles south-southeast of the John A. Baker Field. The wreckage was oriented on a path of about 090 degrees magnetic, and was approximately 500 feet in length. There was general disintegration of the aircraft throughout the wreckage path, with fire damage to several sections, including the cockpit area, the aft fuselage, empennage, and wings. The soot patterns on the wing and empennage structures were random in appearance, with no evidence of metal spray or leading edge to trailing edge soot patterns being observed. All pieces of wreckage found in the first 150 feet of the wreckage path were free of fire damage and soot. These pieces included several fragments of the wing structure and skin, an engine access door, and the number 1 propeller blade. There was a freshly cut swath in the trees along the orientation of the initial wreckage path, and a measurement of the swath matched an aircraft attitude of 23 degrees left bank, and 18 degrees nose low.

The composite propeller blades were broken at the shanks, with one blade found about 45 feet to the right of the wreckage path center line, and the other blade found about 150 feet to the left of the wreckage path center line. The engine was torn from the firewall, with heavy impact damage. The propeller gearbox was separated from the propeller hub; the gearbox was crushed and fragmented. All flight controls surfaces were found within the scatter pattern of the wreckage; flight control continuity was not confirmed due to damage to the aircraft.

The landing gear were separated from the airframe, and the landing gear actuator jackscrew was found in the "gear retracted" position. The flap position could not be determined due to impact damage.

A wreckage distribution diagram is included as an attachment to this report.

MEDICAL AND PATHOLOGICAL INFORMATION

A post mortem examination of the pilot was performed by Dr. Julia C. Goodin, M.D., Nashville Medical Examiners Office, Nashville, Tennessee.

Toxicological testing of the pilot was performed at the Federal Aviation Administration (FAA) Civil Aeromedical Institute, Oklahoma City, Oklahoma. Positive results were observed for hydrocodone (a semisynthetic narcotic analgesic), chlorpheniramine (a potent antihistamine), diphenhydramine (an effective antihistamine, also used for its sedative and anitemetic effects), salicylate, acetaminophen, ethanol, methanol, and acetaldehyde. During blood screening tests, fluoxetine (Prozac) was detected, but it was not confirmed and quantitated by a second analytical technique. The NTSB Office of Research and Engineering assisted in the investigation of the toxicological aspects of this accident, and their factual report

is included as an attachment to this report (see Toxicology Factual Report).

The accident pilot's attending physician, Dr. Stephen L. Averett, prescribed Endal-HD (a cough medication containing hydrocodone bitartrate), Valium (a tranquilizer/sedative/antianxiety agent), Prozac (an antidepressant), and Vasotec (an antihypertensive medication) on various occasions prior to the accident. The dates of the prescriptions, as well as pharmacy records obtained by the NTSB, are included in the Toxicology Factual Report. Dr. Averett reported that the pilot suffered from allergies and depression. Dr. Averett and the accident pilot were co-owners of N132MP, and Dr. Averett (an Aviation Medical Examiner, Certificate Number 19194-4) issued the accident pilot's latest FAA medical certificate (third class) dated July 23, 1992.

TESTS AND RESEARCH

The engine was examined at a maintenance facility in Jackson, Tennessee, where the aircraft wreckage was stored. The examination was performed under the direction of the NTSB, and technical assistance was provided by Porsche, the engine manufacturer. A report of the engine examination is included as an attachment to this report.

The propeller assembly was shipped to the manufacturer's facility in Piqua, Ohio, where an inspection was performed. The examination was performed under the direction of the NTSB, and technical assistance was provided by Hartzell, the propeller manufacturer. A report of the engine examination is included as an attachment to this report.

ADDITIONAL INFORMATION

The wreckage was released to:

H. Joe Kothe (Owner's Representative) American Claim Service, Inc.
5368 Flowering Peach Drive Memphis, Tennessee 38115.

Pilot Information

Certificate:	Private	Age:	43, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine; None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	07/23/1992
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	738 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N132MP
Model/Series:	M20L M20L	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	26-0011
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	07/23/1993, Annual	Certified Max Gross Wt.:	2900 lbs
Time Since Last Inspection:	72 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1004 Hours	Engine Manufacturer:	PORSCHE
ELT:	Installed	Engine Model/Series:	PFM 3200 NO3
Registered Owner:	PERRY AIR, INC.	Rated Power:	212 hp
Operator:	HARDISON, WILLIAM L.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	MRC, 677 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	2120 CST	Direction from Accident Site:	85°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	0 Miles
Lowest Ceiling:	Overcast / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	10° C / 10° C
Precipitation and Obscuration:			
Departure Point:	CLARKSVILLE, TN (CKV)	Type of Flight Plan Filed:	None
Destination:	(0M3)	Type of Clearance:	None
Departure Time:	2056 CST	Type of Airspace:	Class G

Airport Information

Airport:	JOHN A BAKER FIELD (0M3)	Runway Surface Type:	
Airport Elevation:	973 ft	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	Unknown
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	RALPH E HICKS,
Additional Participating Persons:	LYNN W LAFEVER; NASHVILLE, TN MERRITT M BIRKY; WASHINGTON, DC
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/ .