



Aviation Investigation Final Report

Location:	MCHENRY, Maryland	Accident Number:	BF089LA052
Date & Time:	July 1, 1989, 12:06 Local	Registration:	N7784M
Aircraft:	MOONEY M-20F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PLT MADE THE LNDG APCH WITH FULL FLAPS AT AN AIRSPEED OF APRX 90 KTS. ACCORDING TO THE PLT, HE ENCOUNTERED WIND SHEAR AT THE RWY THRESHOLD, LANDED HARD, AND BOUNCED SEVERAL TIMES. THE LANDING GEAR COLLAPSED. THE PLT TRIED TO MAKE A GO-AROUND BUT WAS UNABLE TO CLIMB OUT OF GROUND EFFECT OR GAIN FLYING SPEED. THE ACFT STALLED AND COLLIDED WITH THE GROUND LEFT OF THE RWY. RWY 26 WAS USED. THE LOCAL WINDS WERE REPORTED AT 260 DEGS AT 5 KTS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT LANDED HARD AND COLLAPSED THE LANDING GEAR WHEN HE FAILED TO ARREST HIS DESCENT RATE DURING LANDING. AFTERWARDAS HE TRIED TO MAKE A GO-AROUND THE PILOT DID NOT OBTAIN ADEQUATE FLYING SPEED, THE AIRCRAFT STALLED AND COLLIDED WITH THE GROUND.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FLARE - MISJUDGED - PILOT IN COMMAND
2. (C) RECOVERY FROM BOUNCED LANDING - INADEQUATE - PILOT IN COMMAND

- 3. AIRSPEED - NOT ATTAINED - PILOT IN COMMAND
- 4. STALL/MUSH - INADVERTENT - PILOT IN COMMAND

Occurrence #2: GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

- 5. LANDING GEAR - OVERLOAD
- 6. ABORTED LANDING - ATTEMPTED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	37, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	December 5, 1988
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	167 hours (Total, all aircraft), 55 hours (Total, this make and model), 140 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MOONEY	Registration:	N7784M
Model/Series:	M-20F M-20F	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-0032
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 26, 1989 Annual	Certified Max Gross Wt.:	2740 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2760 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	IO-360-A1A
Registered Owner:	ROBERT L. MCKEEVER	Rated Power:	200 Horsepower
Operator:	ROBERT L MCKEEVER	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / 10 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GAITHERSBURG, MD (GAI)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	GARRETT COUNTY 2G4	Runway Surface Type:	Asphalt
Airport Elevation:	2933 ft msl	Runway Surface Condition:	Dry
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	2495 ft / 75 ft	VFR Approach/Landing:	Go around;Traffic pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): Jones, Dennis

Additional Participating Persons:

Original Publish Date: August 2, 1990

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=11513>

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