



# Aviation Investigation Final Report

<b>Location:</b>	Warren, Vermont	<b>Accident Number:</b>	NYC04CA135
<b>Date &amp; Time:</b>	May 29, 2004, 11:30 Local	<b>Registration:</b>	N53WM
<b>Aircraft:</b>	Mooney M20R	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The airplane was landing on runway 4, a 2,575-foot-long, 30-foot-wide, asphalt runway. The pilot reported that the airplane was approximately 10 feet above the runway, when it encountered a strong wind shear and dropped "fast and hard" onto the runway. The pilot aborted the landing and was informed over the Unicom, that the airplane's left main landing gear had separated. The pilot elected to divert to another airport, where he performed a gear up landing, without further incident. The elevation at the accident site was about 1,470 feet. Winds reported at an airport that was located about 13 miles northeast of the accident site, and at an elevation of 1,165 feet, about the time of the accident, were from 310 degrees, at 14 knots, with 21 knot gusts.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper flare, which resulted in a hard landing. A factor in this accident was the wind shear as reported by the pilot.

## Findings

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

Findings

1. (F) WEATHER CONDITION - WINDSHEAR
2. (C) FLARE - IMPROPER - PILOT IN COMMAND

## Factual Information

On May 29, 2004, about 1130 eastern daylight time, a Mooney M20R, N53WM, was substantially damaged while landing at the Warren-Sugarbush Airport, Warren, Vermont. The certificated commercial pilot was not injured. Visual meteorological conditions prevailed and no flight plan had been filed for the flight that departed Bedford, Massachusetts. The personal flight was conducted under 14 CFR Part 91.

According to the pilot, he over flew the airport and did not observe a windsock; however, he was informed over the Unicom frequency that runway 4 was in use, and he observed an airplane depart from runway 4.

The pilot entered the traffic pattern for runway 4, a 2,575-foot-long, 30-foot-wide, asphalt runway. The pilot stated that the airplane was approximately 10 feet above the runway, when it encountered a strong wind shear and dropped "fast and hard" onto the runway. The pilot aborted the landing and was informed over the Unicom, that the airplane's left main landing gear had separated. The pilot elected to divert to Lebanon, New Hampshire, where he performed a gear up landing, without further incident.

Subsequent examination of the airplane revealed damage to the left wing spar and flap.

The pilot reported 913 hours of total flight experience, which included 757 hours in the same make and model as the accident airplane.

The elevation at the accident site was about 1,470 feet. Winds reported at an airport that was located about 13 miles northeast of the accident site, and at an elevation of 1,165 feet, about the time of the accident, were from 310 degrees, at 14 knots, with 21 knot gusts.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	57, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	November 1, 2002
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	November 29, 2002
<b>Flight Time:</b>	913 hours (Total, all aircraft), 757 hours (Total, this make and model), 845 hours (Pilot In Command, all aircraft), 42 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Mooney	<b>Registration:</b>	N53WM
<b>Model/Series:</b>	M20R	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	29-0191
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	February 7, 2004 Annual	<b>Certified Max Gross Wt.:</b>	3368 lbs
<b>Time Since Last Inspection:</b>	67 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1048 Hrs at time of accident	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-550-G6B
<b>Registered Owner:</b>	Ivan R. Burns	<b>Rated Power:</b>	280 Horsepower
<b>Operator:</b>	Ivan Burns	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MPV,1165 ft msl	<b>Distance from Accident Site:</b>	13 Nautical Miles
<b>Observation Time:</b>	11:51 Local	<b>Direction from Accident Site:</b>	65°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Overcast / 6000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	14 knots / 21 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.93 inches Hg	<b>Temperature/Dew Point:</b>	11°C / -2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Bedford, MA (BED )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Warren, VT (0B7 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Warren-Sugarbush 0B7	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	1470 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	4	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2575 ft / 30 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	44.116664,-72.826942

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Schiada, Luke
<b>Additional Participating Persons:</b>	Fred King; FAA; Portland, ME
<b>Original Publish Date:</b>	September 1, 2004
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=59351">https://data.ntsb.gov/Docket?ProjectID=59351</a>

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