Aviation Investigation Final Report

Location:	WESTPORT, Oklahoma	**Accident Number:**	FTW98LA085
Date & Time:	January 2, 1998, 16:40 Local	**Registration:**	N201LG
Aircraft:	Mooney M20J	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After an uneventful 50-minute cross-country flight, the pilot entered the landing pattern and observed the windsock indicating winds from 190 at 10-15 knots. After a normal downwind, base, and final approach, and about 160 yards down the runway, the aircraft was about to touch down when it started to veer to the left. The pilot attempted to stabilize directional control by applying right rudder and adding power. A gust of wind then 'lifted the right wing to a 20 degree' bank and turned the aircraft further to the left, which aligned the nose of the airplane toward some tree tops. Subsequently, the airplane impacted the trees, and settled to the ground, upright, and nose low. The pattern was flown with 1/2 flaps selected on base and full flaps on final. The pilot said that the winds at the accident site were from 190 degrees at 12 knots, gusting to 15 knots. Reported winds, 28 miles east of the accident site, were from 190 degrees at 16 knots, gusting to 25 knots. Inspection of the wind sock showed that it was functioning properly.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate compensation for the existing wind conditions. A factor was gusty winds.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings
1. (F) WEATHER CONDITION - GUSTS
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings
3. OBJECT - TREE(S)

Factual Information

On January 2, 1998, at 1640 central standard time, a Mooney M20J airplane, N201LG, registered to and operated by the pilot, collided with trees following a loss of control while landing on runway 21 at Keystone Airpark, Westport, Oklahoma. The aircraft was substantially damaged and the private pilot, the sole occupant, was not injured. No flight plan was filed and visual meteorological conditions prevailed for the Title 14 CFR Part 91 personal flight, which originated from Poteau, Oklahoma, at 1550.

In a written statement, the pilot reported that after an uneventful 50 minute cross country flight, he entered the landing pattern at Keystone and observed the windsock which indicated winds from 190 at 10 to 15 knots. He reported that, after a normal downwind, base, and final approach, he crossed the threshold and approximately 160 yards down the runway, the aircraft was about to touchdown when it started to veer to the left. The pilot attempted to stabilize directional control by applying right rudder and adding power. He stated that, a gust of wind then "lifted the right wing to a 20 degree" bank and turned the aircraft further to the left, which aligned the nose of the airplane toward some tree tops. Subsequently, the airplane impacted the trees, and settled to the ground, upright, and nose low.

Examination of the wreckage by an FAA inspector revealed that the fuselage and empennage were buckled, and the right wing was separated at the root.

The pilot flew the standard VFR pattern with 1/2 flaps selected on base and full flaps on final. He reported the winds at the accident site to be from 190 degrees at 12 knots, gusting to 15 knots. The reported winds at Tulsa, Oklahoma, located about 28 miles east of the accident site, were from 190 degrees at 16 knots, gusting to 25 knots. Inspection of the wind sock after the accident showed that it was intact and functioning properly. Examination of the aircraft by an FAA inspector after the accident did not reveal any preexisting control system anomalies that could have contributed to the accident. The pilot did not report any control problems with the aircraft during the flight.

Pilot Information

Certificate:	Private	**Age:**	61,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	August 28, 1996
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	2505 hours (Total, all aircraft), 2100 hours (Total, this make and model), 2404 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	**Registration:**	N201LG
Model/Series:	M20J M20J	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	24-0460
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	December 23, 1995 Annual	**Certified Max Gross Wt.:**	2740 lbs
Time Since Last Inspection:	259 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1723 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed	**Engine Model/Series:**	IO-360-A3B6D
Registered Owner:	RICHARD L. MOORE	**Rated Power:**	200 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:	N/A	**Operator Designator Code:**	N/A

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	TUL ,638 ft msl	**Distance from Accident Site:**	28 Nautical Miles
Observation Time:	16:40 Local	**Direction from Accident Site:**	90°
Lowest Cloud Condition:	Scattered / 2500 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Overcast / 3200 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	16 knots / 25 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	190°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	16°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	POTEAU , OK (RKR)	**Type of Flight Plan Filed:**	None
Destination:	(4F1)	**Type of Clearance:**	None
Departure Time:	15:50 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	KEYSTONE AIRPARK NONE	**Runway Surface Type:**	Asphalt
Airport Elevation:	980 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	21	**IFR Approach:**	None
Runway Length/Width:	4000 ft / 55 ft	**VFR Approach/Landing:**	Full stop

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:**	36.289836,-96.459693(est)

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	JERRY YATES; OKLAHOMA CITY , OK
Original Publish Date:	December 8, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=20511