



Aviation Investigation Final Report

Location:	EDMOND, Oklahoma	Accident Number:	FTW99LA068
Date & Time:	January 21, 1999, 16:30 Local	Registration:	N19Y
Aircraft:	Waco YMF-5	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that he landed fast and the tail-wheel equipped airplane started to float. When the pilot applied brake pressure the airplane started to skid. The pilot then released the brake pressure; however, he thought he was getting too close to the end of the 2,400 foot long grass strip, so he applied 'heavy' braking. Subsequently, the vintage airplane nosed over.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to attain the proper touchdown point due to excessive airspeed and his failure to abort the landing. Factors were the pilot's excessive braking and the short, grass runway.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. (C) AIRSPEED(VREF) - EXCEEDED - PILOT IN COMMAND
 2. (C) ABORTED LANDING - NOT PERFORMED - PILOT IN COMMAND
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Occurrence #2: NOSE OVER
Phase of Operation: LANDING - ROLL

Findings

3. (F) BRAKES(NORMAL) - EXCESSIVE - PILOT IN COMMAND
4. (F) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SHORT RUNWAY/LANDING AREA
5. (F) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - GRASS

Factual Information

On January 21, 1999, approximately 1630 central standard time, a Waco YMF-5 tail-wheel equipped airplane, N19Y, was substantially damaged when it nosed over on landing at a private grass air strip near Edmond, Oklahoma. The non-instrument rated private pilot, who was the sole occupant, was not injured. The airplane was registered to a private individual. Visual meteorological conditions prevailed and a flight plan was not filed for the Title 14 CFR Part 91 personal flight which originated at 1600 from the Guthrie Municipal Airport near Guthrie, Oklahoma.

During a telephone interview conducted by the investigator-in-charge, the pilot stated that he was repositioning the vintage biplane to the owner's private grass air strip. The pilot made two prior approaches to the landing strip to "get a feel for the winds and how to approach over some power lines." On the third attempt the pilot touched down "fast and started to float." The pilot started to "get on the brakes, and the airplane started to skid." The pilot then released the brake pressure; however, he thought that he was getting too close to the end of the 2,400 foot long runway so he applied "heavy braking" and subsequently nosed over.

The 933 hour pilot added that at the time of the accident, he had accumulated 47 hours in the accident airplane.

The nearest weather observation facility is the Will Rogers World Airport near Oklahoma City, Oklahoma, which is 19 miles south of Edmond, Oklahoma. At 1656 the wind was reported to be from 190 degrees at 6 knots. The pilot stated that the condition of the grass air strip at the time of the accident was dry.

Examination of the airplane by a FAA inspector revealed that the empennage, engine mounts, and propeller were bent and the top wing spar was broken. The FAA inspector stated that he could find no anomalies with the vintage airplane. The pilot, who is also a certified mechanic, stated that there were no mechanical problems with the brakes.

Pilot Information

Certificate:	Private	Age:	35, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
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 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 2, 1997
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	933 hours (Total, all aircraft), 47 hours (Total, this make and model), 805 hours (Pilot In Command, all aircraft), 44 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Waco	Registration:	N19Y
Model/Series:	YMF-5 YMF-5	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5015
Landing Gear Type:	Tailwheel	Seats:	3
Date/Type of Last Inspection:	April 17, 1998 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	23 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	557 Hrs	Engine Manufacturer:	Jacobs
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	R-755-B2M
Registered Owner:	SPIRIT WING AVIATION	Rated Power:	275 Horsepower
Operator:	MITCHELL L. MADISON	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:	OKC ,1295 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	15:22 Local	Direction from Accident Site:	195°
Lowest Cloud Condition:	Scattered / 15000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	17°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GUTHRIE , OK (GOK)	Type of Flight Plan Filed:	None
Destination:	(NONE)	Type of Clearance:	None
Departure Time:	16:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	PRIVATE NONE	Runway Surface Type:	Grass/turf
Airport Elevation:	1169 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	2400 ft / 75 ft	VFR Approach/Landing:	Traffic pattern

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:	

Administrative Information

Investigator In Charge (IIC):	Lupino, Nicole
Additional Participating Persons:	TERRY CARR; OKLAHOMA CITY , OK
Original Publish Date:	April 18, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=45647

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).