



# **Aviation Investigation Final Report**

Location: Burnet, Texas Accident Number: GAA18CA287

Date & Time: May 19, 2018, 11:30 Local Registration: N427LS

Aircraft: Maule M 7 Aircraft Damage: Substantial

**Defining Event:** Loss of control in flight **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

According to the pilot in the tailwheel-equipped airplane, he attempted a three-point landing with 48° of flaps applied in a strong, left crosswind. He reported that, after landing, the airplane lifted off again, and the left wing lifted. The pilot applied aileron and rudder inputs to counter the left crosswind, but the inputs were ineffective due to the airplane's low airspeed. He applied power to fly out of the gusting left crosswind condition, but the airplane veered right, the right wing struck the ground, and the airplane cartwheeled.

The airplane sustained substantial damage to the engine mounts, both wings, and the aft fuselage.

The METAR at the accident airport reported, about the time of the accident, wind from 160° at 12 knots, gusting to 25 knots. The highest wind reported during the observation period was from 190° at 31 knots. The pilot landed the airplane on runway 19.

According to the manufacturer's airplane flight manual, the maximum demonstrated crosswind component was 12 knots, and the flap extension should be limited to 0°. The pilot reported that the accident could have been prevented if he had attempted a wheel landing with less than full flaps.

The pilot reported that there were no mechanical malfunctions or failures with the airplane that would have precluded normal operation.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to maintain directional control during landing in gusting wind conditions and with an incorrect flap configuration.

#### **Findings**

Aircraft Directional control - Not attained/maintained

Aircraft Trailing edge flaps - Incorrect use/operation

Personnel issues Aircraft control - Pilot

Personnel issues Use of equip/system - Pilot

Environmental issues Gusts - Effect on operation

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# **Factual Information**

## **History of Flight**

Landing-flare/touchdown	Other weather encounter
Landing-flare/touchdown	Loss of control in flight (Defining event)
Landing-flare/touchdown	Attempted remediation/recovery
Landing-flare/touchdown	Collision with terr/obj (non-CFIT)

### **Pilot Information**

Certificate:	Commercial	Age:	64,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	May 19, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 15, 2016
Flight Time:	(Estimated) 2947 hours (Total, all aircraft), 685 hours (Total, this make and model), 2661 hours (Pilot In Command, all aircraft), 37 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft)		

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### Aircraft and Owner/Operator Information

Aircraft Make:	Maule	Registration:	N427LS
Model/Series:	M 7 235C	Aircraft Category:	Airplane
Year of Manufacture:	2001	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	25057C
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	September 26, 2017 Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	990 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	IO-540-W1A5
Registered Owner:		Rated Power:	235 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KBMQ,1288 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	16:53 Local	Direction from Accident Site:	56°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 25 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	27°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	FREDERICKSBURG, TX (T82	Type of Flight Plan Filed:	None
Destination:	Burnet, TX (BMQ )	Type of Clearance:	None
Departure Time:	09:30 Local	Type of Airspace:	Class G

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#### **Airport Information**

Airport:	BURNET MUNI KATE CRADDOCK FIEL BMQ	Runway Surface Type:	Asphalt
Airport Elevation:	1284 ft msl	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	5000 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

#### **Wreckage and Impact Information**

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	30.738889,-98.238609(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Hicks, Michael
investigator in charge (iic).	i iicks, iviici idei
Additional Participating Persons:	Corey L Wehmeyer; FAA; Lubbock, TX
Original Publish Date:	March 18, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97284

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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