



# **Aviation Investigation Final Report**

Location:	Goodland, Kansas	Accident Number:	GAA16CA028
Date & Time:	October 24, 2015, 15:20 Local	Registration:	N5638K
Aircraft:	Maule M5	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

# Analysis

According to the pilot of the tailwheel-equipped airplane, during the landing roll at 70 knots, on runway 30, the airplane encountered a powerful gust of wind. He reported that the gust caused the tail to lift off of the runway, and the right wing impacted the grass safety area located to the right of the concrete runway. The pilot reported that after the right wing impacted the ground, the airplane was "catapulted" into the air about 10 feet, and came to rest inverted about 30 feet to the right of the runway. The airplane sustained substantial damage to wings, fuselage, and empennage.

At the time of the accident, the wind at the aerodrome was reported as 210 degrees true at 9 knots. In the hours preceding the accident, the aerodrome reported wind from the south-west with gusts up to 19 knots.

The pilot reported that there were no mechanical failures or anomalies prior to or during the flight that would have prevented normal flight operation.

# **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate crosswind compensation and subsequent loss of directional control during the landing roll, resulting in a runway excursion and nose over.

### Findings

Aircraft	Directional control - Not attained/maintained
Aircraft	Crosswind correction - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Gusts - Effect on equipment

# **Factual Information**

### History of Flight

Landing-landing roll	Other weather encounter
Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Collision with terr/obj (non-CFIT)

#### **Pilot Information**

Certificate:	Commercial	Age:	76,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	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:	September 1, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 29, 2014
Flight Time:	(Estimated) 10400 hours (Total, all aircraft), 7000 hours (Total, this make and model), 10300 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

# Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

# Aircraft and Owner/Operator Information

Aircraft Make:	Maule	Registration:	N5638K
Model/Series:	M5 210TC	Aircraft Category:	Airplane
Year of Manufacture:	1980	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	9002C
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	October 10, 2015 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1893 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TO-360-F1A6D
Registered Owner:	GREGORY L. WHIPPLE	Rated Power:	210 Horsepower
Operator:	GREGORY L. WHIPPLE	Operating Certificate(s) Held:	None

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	KGLD,3688 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	128°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.19 inches Hg	Temperature/Dew Point:	18°C / 0°C
Precipitation and Obscuration:	No Obscuration; No Precipitat	tion	
Departure Point:	LOS LUNAS, NM (E98 )	Type of Flight Plan Filed:	None
Destination:	YANKTON, SD (YKN )	Type of Clearance:	None
Departure Time:	11:00 Local	Type of Airspace:	Class E

# **Airport Information**

Airport:	RENNER FLD /GOODLAND MUNI/ GLD	Runway Surface Type:	Concrete
Airport Elevation:	3657 ft msl	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	5499 ft / 100 ft	VFR Approach/Landing:	Straight-in

# 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:	39.370555,-101.69889(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Chad D Landes; Federal Aviation Administration; Wichita , KS
Original Publish Date:	March 14, 2016
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=92238

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