Aviation Investigation Final Report

Location:	Show Low, Arizona	**Accident Number:**	LAX02LA219
Date & Time:	July 7, 2002, 19:30 Local	**Registration:**	N9139E
Aircraft:	Maule M-5-235C	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane veered off the runway and nosed over while attempting to land in a crosswind. During an overflight of the runway, the pilot observed that the winds were from about 130 degrees at less than 15 knots and he elected to land on runway 21. The pilot stated the approach to runway 21 was normal, despite the crosswind conditions that he encountered. During the landing roll, the airplane suddenly veered to the right side of the runway, and he attempted to execute a go-around by adding full power. The airplane became momentarily airborne, and the right main landing gear collided with a rising embankment located on the right side of the runway. The airplane nosed over and came to rest inverted. An FAA inspector examined the skid marks and ground scars that resulted from the accident. He said that it appeared the airplane had initially landed solely on the right main landing gear, with the nose pointing to the right, off the runway. He thought that the airplane had continued off the right side of the runway after landing in this configuration. The tail wheel had incurred too much damage for him to determine if any mechanical malfunctions had occurred prior to the accident.

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 crosswind conditions and failure to maintain directional control.

Findings

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

Findings
1. (F) WEATHER CONDITION - CROSSWIND
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings
4. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

On July 7, 2002, about 1930 mountain standard time, a Maule M-5-235C, N9139E, veered off the runway and nosed over while attempting to land at the Show Low Regional Airport (SOW), Show Low, Arizona. The pilot/owner was operating the airplane under the provisions of 14 CFR Part 91. The commercial pilot received minor injuries and the passenger was not injured; the airplane sustained substantial damage. Visual meteorological conditions prevailed, and a visual flight rules flight plan was filed. The personal cross-country flight departed Falcon Field Airport, Mesa, Arizona, about 1700, with a planned destination of SOW.

In a telephone conversation with the National Transportation Safety Board, the Federal Aviation Administration (FAA) inspector stated that the pilot reported to him that he was attempting to land in SOW as he had successfully done many times prior. While approaching the vicinity of the airport, he called UNICOM to request weather information. An attendant did not answer, so he opted to make a low approach over the airport in an effort to determine wind conditions from the windsock. He decided to land on runway 21, and estimated the winds were blowing less than 15 knots from about 130 degrees.

The pilot stated the approach to runway 21 was normal, despite the crosswind conditions that he encountered. During the landing roll, the airplane suddenly veered to the right side of the runway, and he attempted to execute a go-around by adding full power. The airplane became momentarily airborne, and the right main landing gear collided with a rising embankment located on the right side of the runway. The airplane nosed over, and came to rest inverted. The pilot thought the veer to the right could have been due to a failure of the tail wheel.

The FAA inspector examined the skid marks and ground scars that resulted from the accident. He said that it appeared the airplane had initially landed solely on the right main landing gear, with the nose pointing to the right, off the runway. He thought that the airplane had continued off the right side of the runway after landing in this configuration. The tail wheel had incurred too much damage for him to determine if any mechanical malfunctions had occurred prior to the accident.

Pilot Information

Certificate:	Commercial	**Age:**	69,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Front
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:**	May 7, 2002
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	August 11, 2000
Flight Time:	2971 hours (Total, all aircraft), 200 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Maule	**Registration:**	N9139E
Model/Series:	M-5-235C	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	7108C
Landing Gear Type:	Tailwheel	**Seats:**	4
Date/Type of Last Inspection:	May 19, 2002 Annual	**Certified Max Gross Wt.:**	2300 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	2072.6 Hrs as of last inspection	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-540J
Registered Owner:	Robert Randall Koons	**Rated Power:**	235 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Dusk
Observation Facility, Elevation:	SOW,6415 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	18:50 Local	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Scattered / 10000 ft AGL	**Visibility**	30 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	360°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.1 inches Hg	**Temperature/Dew Point:**	32°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mesa, AZ (FFZ)	**Type of Flight Plan Filed:**	VFR
Destination:	Show Low, AZ (SOW)	**Type of Clearance:**	None
Departure Time:	17:00 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	Show Low Regional Airport SOW	**Runway Surface Type:**	Asphalt
Airport Elevation:	6415 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	21	**IFR Approach:**	None
Runway Length/Width:	3937 ft / 60 ft	**VFR Approach/Landing:**	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor, 1 None	**Latitude, Longitude:**	34.25,-110.009445

Administrative Information

Investigator In Charge (IIC):	Petterson, G.
Additional Participating Persons:	Jack Major; Federal Aviation Administration; Scottsdale, AZ
Original Publish Date:	September 29, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=55155