

# **Aviation Investigation Final Report**

Location: Kusatan, Alaska Accident Number: ANC23LA047

Date & Time: July 4, 2023, 16:00 Local Registration: N51592

Aircraft: Maule M-5-210C Aircraft Damage: Substantial

**Defining Event:** Nose over/nose down **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot reported that during the landing roll out on a remote, gravel/sand bar, the main landing gear wheels encountered an area of uneven sand and the airplane bounced and pitched into the air. She attempted to correct to no avail. Subsequently, when the airplane touched down from the bounce, the wheels dug into the sand, and the airplane nosed over, resulting in substantial damage to the wing struts. The pilot reported that there were no preaccident mechanical malfunctions or anomalies 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 selection of unsuitable terrain for landing, which resulted in a bounced landing and an encounter with soft terrain, and a nose over.

### Findings

Personnel issues	Decision making/judgment - Pilot
Environmental issues	Rough terrain - Contributed to outcome

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### **Factual Information**

### History of Flight

Landing-landing roll	Nose over/nose down (Defining event)
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#### **Pilot Information**

Certificate:	Airline transport; Commercial; Flight instructor; Military	Age:	34,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	December 2, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	January 4, 2023
Flight Time:	2050 hours (Total, all aircraft), 40 hours (Total, this make and model), 1800 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

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### **Aircraft and Owner/Operator Information**

Aircraft Make:	Maule	Registration:	N51592
Model/Series:	M-5-210C	Aircraft Category:	Airplane
Year of Manufacture:	1974	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	6023C
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	May 9, 2023 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	35 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2640 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-360 D33A
Registered Owner:	On file	Rated Power:	210 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:	PASX,113 ft msl	Distance from Accident Site:	46 Nautical Miles
Observation Time:	15:56 Local	Direction from Accident Site:	140°
<b>Lowest Cloud Condition:</b>	Scattered / 9500 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.26 inches Hg	Temperature/Dew Point:	12°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anchorage, AK (EDF)	Type of Flight Plan Filed:	VFR
Destination:	Kusatan, AK	Type of Clearance:	VFR;Traffic advisory;VFR flight following
Departure Time:	15:00 Local	Type of Airspace:	Class G

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## **Airport Information**

Airport:	McArthur River Gravel Bar NONE	Runway Surface Type:	Dirt;Gravel
Airport Elevation:	49 ft msl	<b>Runway Surface Condition:</b>	Dry;Soft
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:	1500 ft / 50 ft	VFR Approach/Landing:	Full stop;Traffic pattern

### Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	61.061,-152.0305

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#### **Administrative Information**

Investigator In Charge (IIC):	Ward, Mark
Additional Participating Persons:	James Howery; FAA; Anchorage, AK
Original Publish Date:	October 26, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=192578

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

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