



# Aviation Investigation Final Report

<b>Location:</b>	Marysville, California	<b>Accident Number:</b>	WPR23LA315
<b>Date &amp; Time:</b>	August 10, 2023, 14:05 Local	<b>Registration:</b>	N20268
<b>Aircraft:</b>	Cessna 172M	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision with terr/obj (non-CFIT)	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The flight instructor reported that during an instructional flight, he was conducting a high-speed taxi exercise on the runway with a student pilot, to work on rudder control. He instructed the student to remain at or below 50 mph and that they would begin slowing the airplane about 1,000 ft from the departure end of the runway. About halfway down the length of the runway, the instructor noticed that the airspeed seemed high, and he informed the student that they “needed to slow down a little”; however, the airplane continued to accelerate. When the instructor told the student to begin their deceleration, the airplane did not decelerate as expected. As the airplane overran the runway, the instructor took the flight controls and elected to take off. The airplane was flown to the originating airport, where substantial damage to the horizontal stabilizer and elevator was discovered during postflight inspection, which resulted from impact with a runway end light during the runway excursion. The instructor reported that there were no preaccident mechanical malfunctions or failures 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 flight instructor’s failure to monitor the airplane’s speed during a high-speed taxi, resulting in a runway excursion.

## Findings

<b>Personnel issues</b>	Monitoring equip/instruments - Instructor/check pilot
<b>Personnel issues</b>	Decision making/judgment - Instructor/check pilot
<b>Personnel issues</b>	Understanding/comprehension - Instructor/check pilot
<b>Aircraft</b>	(general) - Incorrect use/operation
<b>Aircraft</b>	Airspeed - Not attained/maintained

## Factual Information

### History of Flight

<b>Taxi</b>	Attempted remediation/recovery
<b>Taxi</b>	Collision with terr/obj (non-CFIT) (Defining event)
<b>Takeoff</b>	Abrupt maneuver

### Flight instructor Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	60,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 3 Waiver time limited special	<b>Last FAA Medical Exam:</b>	December 7, 2021
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	September 2, 2022
<b>Flight Time:</b>	849 hours (Total, all aircraft), 108 hours (Total, this make and model), 765 hours (Pilot In Command, all aircraft), 122 hours (Last 90 days, all aircraft), 51 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Student pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	17,Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	June 5, 2023
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	19 hours (Total, all aircraft), 19 hours (Total, this make and model), 19 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N20268
<b>Model/Series:</b>	172M	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1972	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	17261144
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	July 19, 2023 Annual	<b>Certified Max Gross Wt.:</b>	2300 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5782 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320-E2D
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	160 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	Pilot school (141)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MYV, 62 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	13:53 Local	<b>Direction from Accident Site:</b>	8°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	29.93 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 15°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Auburn, CA (KAUN)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Marysville, CA	<b>Type of Clearance:</b>	VFR flight following
<b>Departure Time:</b>	13:40 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	Yuba County MYV	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	64 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	32	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6007 ft / 150 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	N/A	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	N/A	<b>Latitude, Longitude:</b>	39.0977,-121.5698

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Blocher, Kristyn
<b>Additional Participating Persons:</b>	Timothy Snyder; Federal Aviation Administration; Sacramento, CA
<b>Original Publish Date:</b>	November 30, 2023
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=192871">https://data.nts.gov/Docket?ProjectID=192871</a>

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