



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Leadville, Colorado	<b>Accident Number:</b>	CEN21LA086
<b>Date &amp; Time:</b>	December 13, 2020, 20:00 Local	<b>Registration:</b>	N686TM
<b>Aircraft:</b>	Eclipse EA 500	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Landing area overshoot	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot reported that, while conducting a night landing on a runway contaminated with ice and patchy packed snow, the airplane overshot the touchdown zone. The pilot tried to fly the airplane onto the runway to avoid floating. The airplane touched down firm and the pilot applied moderate braking, but the airplane did not decelerate normally. The airplane went off the end of the runway and collided with several Runway End Identifier Lights (REILs) and a tree. The airplane sustained substantial damage to the left and right wings. The pilot reported that he did not feel modulation in the anti-lock braking system (ABS) and felt that might have contributed to the accident. An examination of fault codes from the airplane's diagnostic storage unit indicated no ABS malfunctions or failures. An airport employee reported that he saw the airplane unusually high on the final approach and during the landing the airplane floated or stayed in ground effect before it touched down beyond the midpoint of the runway. The airplane's long touchdown was captured by an airport surveillance video, which is included in the report docket.

## 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 proper control of the airplane, which led to an unstabilized approach and a long landing on a runway contaminated with ice and patchy packed snow resulting in a runway excursion.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Environmental issues</b>	Snow/slush/ice covered surface - Effect on operation
<b>Aircraft</b>	Descent/approach/glide path - Not attained/maintained
<b>Aircraft</b>	Surface speed/braking - Not attained/maintained

## Factual Information

### History of Flight

Landing	Landing area overshoot (Defining event)
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

### Pilot Information

Certificate:	Airline transport; Commercial	Age:	63, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 31, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	December 2, 2020
Flight Time:	(Estimated) 5300 hours (Total, all aircraft), 31 hours (Total, this make and model), 45 hours (Last 90 days, all aircraft), 31 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Eclipse	Registration:	N686TM
Model/Series:	EA 500	Aircraft Category:	Airplane
Year of Manufacture:	2008	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	000221
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	December 10, 2019 Annual	Certified Max Gross Wt.:	6034 lbs
Time Since Last Inspection:		Engines:	2 Turbo fan
Airframe Total Time:	1740 Hrs as of last inspection	Engine Manufacturer:	Pratt & Whitney Canada
ELT:	Installed, not activated	Engine Model/Series:	PW610F-A
Registered Owner:		Rated Power:	900 Lbs thrust
Operator:	On file	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	LXV, 1933 ft msl	Distance from Accident Site:	
Observation Time:	19:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few	Visibility	6 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	San Diego, CA (MYF)	Type of Flight Plan Filed:	IFR
Destination:	Leadville, CO	Type of Clearance:	IFR
Departure Time:	16:54 Local	Type of Airspace:	Class E

## Airport Information

Airport:	Lake County LXV	Runway Surface Type:	Asphalt
Airport Elevation:	9933 ft msl	Runway Surface Condition:	Ice; Snow
Runway Used:	16	IFR Approach:	RNAV
Runway Length/Width:	6400 ft / 75 ft	VFR Approach/Landing:	Full stop

## 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:	39.2242, -106.3152(est)

## Administrative Information

Investigator In Charge (IIC):	Scott, Arnold		
Additional Participating Persons:	Justin Eddleman; FAA		
Original Publish Date:	September 22, 2021	Investigation Class:	4
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=102415">https://data.nts.gov/Docket?ProjectID=102415</a>		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).