



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Merced, California	Accident Number:	GAA19CA052
Date & Time:	November 3, 2018, 19:30 Local	Registration:	N2956B
Aircraft:	Piper PA28	Aircraft Damage:	Substantial
Defining Event:	Collision during takeoff/land	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, during a night currency flight, he flew to an airport with which he was not familiar. He recalled that the approach was normal, and that, during the flare, the airplane collided with three of the runway's medium-intensity approach lighting system runway alignment indicator lights. He then landed the airplane on the runway, and during taxi to parking, the nosewheel tire deflated.

The pilot reported that it had been more than 90 days since his last flight at night.

The airplane sustained substantial damage to both wings and the lower right aft fuselage.

The pilot reported that there were no mechanical malfunctions or failures with the airplane 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 improper glidepath during a landing at night, which resulted in a collision with approach lights.

Findings

Personnel issues	Aircraft control - Pilot
Environmental issues	Dark - Effect on personnel
Aircraft	Descent/approach/glide path - Not attained/maintained
Environmental issues	Runway/taxi/approach light - Effect on operation

Factual Information

History of Flight

Landing-flare/touchdown	Collision during takeoff/land (Defining event)
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Pilot Information

Certificate:	Private	Age:	48,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	October 26, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 9, 2017
Flight Time:	(Estimated) 253 hours (Total, all aircraft), 251 hours (Total, this make and model), 288 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N2956B
Model/Series:	PA28 236	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28-7911270
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	September 1, 2018 Annual	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2999.82 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91 installed, not activated	Engine Model/Series:	O-540-J3A5D
Registered Owner:		Rated Power:	235 Horsepower
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:	KMCE, 152 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	02:53 Local	Direction from Accident Site:	69°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	17°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lincoln, CA (LHM)	Type of Flight Plan Filed:	None
Destination:	Merced, CA (MCE)	Type of Clearance:	None
Departure Time:	18:10 Local	Type of Airspace:	Class E

Airport Information

Airport:	Merced Rgnl/Macready Field MCE	Runway Surface Type:	Asphalt
Airport Elevation:	155 ft msl	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	5914 ft / 150 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:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	37.284721, -120.513885(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Abigail Cahoon; FAA; Fresno, CA
Original Publish Date:	September 26, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98607

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).