



# Aviation Investigation Final Report

<b>Location:</b>	Santa Rosa, California	<b>Accident Number:</b>	WPR23LA320
<b>Date &amp; Time:</b>	August 19, 2023, 15:20 Local	<b>Registration:</b>	N3282L
<b>Aircraft:</b>	Cessna 172H	<b>Aircraft Damage:</b>	Unknown
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Business		

## Analysis

The pilot reported the airplane recently had an engine upgrade and he was flying it to break in the engine. He had performed fuel calculations based on its previously consumption rate and did not realize the new engine was consuming more fuel than planned. During final approach the airplane experienced a total loss of power due to fuel exhaustion. The pilot performed a forced landing on an open field with high vegetation, substantially damaging the right wing and right horizontal stabilizer. The pilot reported that there were no preaccident 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 inadequate fuel management which resulted in a total loss of engine power due to fuel exhaustion.

## Findings

Personnel issues	Preflight inspection - Pilot
Personnel issues	Flight planning/navigation - Pilot
Personnel issues	Decision making/judgment - Pilot

## Factual Information

### History of Flight

Approach	Loss of engine power (total) (Defining event)
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### Pilot Information

Certificate:	Commercial; Flight instructor	Age:	68
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	June 1, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3154 hours (Total, all aircraft), 1770 hours (Total, this make and model), 67 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3282L
Model/Series:	172H	Aircraft Category:	Airplane
Year of Manufacture:	1967	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17256182
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	O-360
Registered Owner:	On file	Rated Power:	180
Operator:	On file	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KSTS, 119 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	14:53 Local	<b>Direction from Accident Site:</b>	166°
<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>	12 knots / 16 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	160°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.79 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 15°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Santa Rosa, WA (KSTS)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Santa Rosa, CA	<b>Type of Clearance:</b>	Unknown
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Unknown

## Airport Information

<b>Airport:</b>	Santa Rosa STS	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	113 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	14	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6000 ft / 150 ft	<b>VFR Approach/Landing:</b>	Forced landing; Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Unknown
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	38.509694, -122.81288

## Administrative Information

Investigator In Charge (IIC):	Basti, Paymaun
Additional Participating Persons:	Amanda Bailey; FAA; Oakland, CA
Original Publish Date:	January 4, 2024
Last Revision Date:	
Investigation Class:	<a href="#">Class 4</a>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	<a href="https://data.nts.gov/Docket?ProjectID=192920">https://data.nts.gov/Docket?ProjectID=192920</a>

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