



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Santa Ynez, California	Accident Number:	WPR23LA131
Date & Time:	March 18, 2023, 10:00 Local	Registration:	N40635
Aircraft:	Maule M-4-220C	Aircraft Damage:	Substantial
Defining Event:	Fuel starvation	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, while in a climb on the left crosswind leg of the airport traffic pattern, the engine stopped producing power. He made a left turn toward the airport, activated the electric fuel pump, and changed the fuel selector valve position from the left-wing fuel tank to the right-wing fuel tank. Despite the pilot's attempts, the engine would not restart, and the pilot made a forced landing in a vineyard. The pilot stated that he believes he unported the available fuel in the left tank while in the climbing left-hand turn. The left wing and left elevator were substantially damaged. 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 planning, which resulted in a loss of engine power due to fuel starvation.

Findings

Personnel issues	Fuel planning - Pilot
Personnel issues	Use of equip/system - Pilot
Aircraft	Fuel - Fluid management

Factual Information

History of Flight

Maneuvering	Fuel starvation (Defining event)
Maneuvering	Loss of engine power (total)

Pilot Information

Certificate:	Private	Age:	65, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	Lap only
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:	December 17, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 29, 2023
Flight Time:	(Estimated) 2031 hours (Total, all aircraft), 266 hours (Total, this make and model), 848 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Maule	Registration:	N40635
Model/Series:	M-4-220C	Aircraft Category:	Airplane
Year of Manufacture:	1972	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2153C
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	January 7, 2023 Annual	Certified Max Gross Wt.:	2200 lbs
Time Since Last Inspection:	14 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1721.2 Hrs as of last inspection	Engine Manufacturer:	Franklin
ELT:	C126 installed, not activated	Engine Model/Series:	6H-350-C1
Registered Owner:	On file	Rated Power:	220 Horsepower
Operator:	HARTMANN PETER C	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KIZA, 671 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	09:15 Local	Direction from Accident Site:	25°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	10°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Santa Ynez, CA	Type of Flight Plan Filed:	None
Destination:	Santa Ynez, CA	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class E

Airport Information

Airport:	Santa Ynez Airport KIZA	Runway Surface Type:	Asphalt
Airport Elevation:	674 ft msl	Runway Surface Condition:	Dry
Runway Used:	08/26	IFR Approach:	None
Runway Length/Width:	2800 ft / 75 ft	VFR Approach/Landing:	Forced landing;Touch and go;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	34.6,-120.08(est)

Administrative Information

Investigator In Charge (IIC):	Blocher, Kristyn
Additional Participating Persons:	Marcos Rico; Federal Aviation Administration; Van Nuys, CA
Original Publish Date:	June 23, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=106915

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](#).