



Aviation Investigation Final Report

Location:	Hollister, California	Accident Number:	GAA19CA426
Date & Time:	June 20, 2019, 12:00 Local	Registration:	N28CU
Aircraft:	North American T28	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, after takeoff and while the airplane was about 500 ft above ground level, he retracted the landing gear and that, shortly thereafter, the engine sputtered and lost power. He adjusted the fuel mixture, but it did not have any effect. He attempted to return to the airport, but after realizing that the airplane would not reach the runway, he decided to land in a dirt field near the airport with the landing gear retracted. He recalled that he had the airplane refueled about a week before the accident. The airplane sustained substantial damage to the fuselage. The Federal Aviation Administration inspector who examined the airplane reported that he only removed about 1 or 2 cups of fuel out of the fuel system. The airplane was equipped with only one fuel gauge, which had a single switch that had left, right, and center positions. In the left position, it showed empty; in the center position, which showed the total fuel onboard, it showed 900 lbs; and in the right position, it also showed 900 lbs. No fuel leaks were found, and there were no signs of fuel on the ground. The pilot reported as a safety recommendation to "always top off fuel."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's improper fuel planning, which resulted in fuel exhaustion and the subsequent total loss of engine power.

Findings

Personnel issues	Fuel planning - Pilot
Aircraft	Fuel - Fluid level
Aircraft	Fuel - Inadequate inspection
Aircraft	Fuel quantity indicator - Incorrect service/maintenance

Factual Information

History of Flight

Initial climb	Loss of engine power (total) (Defining event)
Initial climb	Fuel exhaustion
Landing	Off-field or emergency landing

Pilot Information

Certificate:	Commercial	Age:	78, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	July 9, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 14, 2018
Flight Time:	(Estimated) 1653 hours (Total, all aircraft), 1000 hours (Total, this make and model), 1610 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 0.6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	North American	Registration:	N28CU
Model/Series:	T28 B	Aircraft Category:	Airplane
Year of Manufacture:	1956	Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	200302
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	September 10, 2018 Condition	Certified Max Gross Wt.:	14000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	15673.9 Hrs at time of accident	Engine Manufacturer:	Wright
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	R-1820-86B
Registered Owner:	On file	Rated Power:	1425 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KCVH,237 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	19:00 Local	Direction from Accident Site:	321°
Lowest Cloud Condition:	Scattered / 1400 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	18°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hollister, CA (CVH)	Type of Flight Plan Filed:	Unknown
Destination:	Hollister, CA (CVH)	Type of Clearance:	Unknown
Departure Time:	12:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Hollister Muni CVH	Runway Surface Type:	Asphalt
Airport Elevation:	230 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	6350 ft / 100 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	36.893333,-121.410278(est)

Administrative Information

Investigator In Charge (IIC):	Gutierrez, Eric
Additional Participating Persons:	Michael A Schaadt; FAA; San Jose , CA
Original Publish Date:	April 13, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99867

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](#).