



# **Aviation Investigation Final Report**

Location: Murrieta, California Accident Number: WPR23LA098

Date & Time: January 27, 2023, 08:37 Local Registration: N4758C

Aircraft: Cessna T210N Aircraft Damage: Substantial

**Defining Event:** Unknown or undetermined **Injuries:** 1 Serious, 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

Before departure, the pilot in command (PIC) performed a preflight inspection of the accident airplane and confirmed that the left- and right-wing fuel tanks contained about 33 gallons of 100LL fuel per side. During the 26-minute cross-country flight, the PIC moved the fuel selector from the left tank position to the right tank about 13 minutes into the flight. When they approached the airport, the PIC retarded the throttle to near idle, while descending and decreasing the airplane's airspeed. He performed a near mid-field airport crossing from west to east and turned right to enter the downwind for a landing on runway 36. With the landing gear extended and 10° flaps applied, the PIC made another right turn from the downwind leg to the base leg. During the turn from base to final, the airplane's altitude was about 150 ft above ground level (agl), and the airspeed was 80 knots. The pilot added power to make the runway but the engine did not respond. The airplane continued to descend and impacted a ravine about 2,000 ft short of runway 36, where it came to rest inverted.

Postaccident examination of the airplane revealed that the throttle, mixture, and propeller linkage remained intact. The left- and right-wing fuel tanks sustained impact damage and were breached. The left fuel tank cap was present and accounted for, but the right fuel tank cap was not. An engine test run was conducted, and the engine ran for a short time. Examination of the engine revealed impact damage to the electrical system wiring harness, attenuating the power source and starter relay. The starter would spin but did not engage for engine rotation.

Although the engine ran during the postaccident examination, impact damage to the electrical system and starter prevented a conclusive determination for the loss of engine power. The pilot's decision to intercept the final leg of the airport traffic pattern at an altitude of 150 ft agl, with insufficient airspeed to reach the runway threshold, contributed to the outcome when the engine failed to respond.

Since the right fuel tank cap was not located during the aircraft recovery, fuel starvation or exhaustion was possible, particularly while operating with the auxiliary fuel pump in the on position and the fuel selector in the right tank position while making the right turn from base to final. However, as a result of impact damage, the right-wing fuel tank was breached and the fuel quantity could not be determined. The reason for the loss of engine power could not be determined.

### **Probable Cause and Findings**

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

A loss of engine power during the turn from base to final for undetermined reasons. Contributing to the accident was the pilot's decision to not maintain traffic pattern altitude, which resulted in the off-airport landing.

#### **Findings**

Aircraft	(general) - Unknown/Not determined	
Personnel issues	Decision making/judgment - Pilot	

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#### **Factual Information**

### **History of Flight**

**Approach-VFR pattern base** Unknown or undetermined (Defining event)

Maneuvering-low-alt flying Off-field or emergency landing

On January 27, 2023, at 0837 Pacific standard time, a Cessna T210N, N4758C, was substantially damaged when it was involved in an accident near Murrieta, California. The pilot sustained minor injuries and pilot-rated passenger sustained serious injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that he and his pilot-rated passenger were flying a 26-minute cross-country flight from Long Beach Airport (LGB), Long Beach, California to French Valley Airport (F70), Murrieta, California. The pilot reported that the preflight inspection of the airplane was normal, and that he physically looked in the left and right fuel tanks, which contained about 33 gallons of 100LL fuel per side before departing LGB. The pilot reported that he had completed an engine runup and observed normal engine rpm parameters during the propeller and magneto drop checks. The pilot reported that about 13 minutes into the 26-minute flight, he moved the fuel selector from the left tank to the right tank. When they approached the airport, the pilot retarded the throttle to near idle while descending, decreasing the airplane's airspeed. He performed a near mid-field airport crossing from west to east and turned right to enter the downwind for a landing on runway 36.

The pilot reported that while on the downwind leg of the traffic pattern, about 1,000 ft agl, he extended the landing gear, extended the flaps to 10°, trimmed the airplane for 90 knots, and made a right turn to the base leg of the traffic pattern. According to ADS-B data, during the turn from base to final the airplane's airspeed was 80 knots at about 150 ft agl. The pilot reported that he manipulated the throttle to add power, but the engine did not respond. He cycled the throttle to troubleshoot the anomaly and turned on the auxiliary fuel pump. Despite his efforts the engine still did not respond, and the airplane descended into a ravine, impacted the ground, and nosed over about 2,000 ft short of the runway threshold.

The airplane came to rest with the nose and spinner oriented to the west while the attached tail section was oriented to the east. The right wing sustained impact damage to the leading edge and the spar was fractured near the middle of the wing. The right-wing tank was breached, and the vented fuel cap was not present. The left wing's leading edge sustained impact damage and the outboard 1/3 of the wing and aileron were folded underneath the wing. The left-wing tank was breached and the vented fuel cap was present and unremarkable. The fuselage remained intact, but the empennage sustained substantial damage.

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During a postaccident examination, an engine test run was conducted using an auxiliary gravity-fed fuel tank attached to the upper fuselage. During the first engine start attempt the engine would not rotate. Relays were audibly heard during the preparation of the engine start. Multiple impact-damaged circuit breakers near the battery position were then replaced to facilitate the engine run. An auxiliary power source was used to connect power to the starter relay, and the starter operated normally from the switch. The engine started successfully but ran with some hesitation and ultimately lost power. Further attempts to start the engine were unsuccessful.

Engine control cable continuity was established to the instrument panel. The airplane's fuel system revealed no anomalies with continuity from the left- and right-wing tank fuel lines to the fuel selector. Fuel system integrity was observed from the fuel selector through the manifold, and to each of the cylinder's injectors, which were clear and free of impedance. Each of the six cylinder combustion chambers and piston heads were examined using a lighted borescope and revealed normal operational signatures. Each cylinder's intake and exhaust valves were consistent with normal operation with no anomalies. The induction and exhaust systems were clear and free of any impedance.

#### **Pilot Information**

Certificate:	Private	Age:	69,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
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 15, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 26, 2021
Flight Time:	(Estimated) 3130.9 hours (Total, all aircraft), 2248.9 hours (Total, this make and model), 3059.8 hours (Pilot In Command, all aircraft), 1.8 hours (Last 90 days, all aircraft), 1.8 hours (Last 30 days, all aircraft)		

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## Pilot-rated passenger Information

Certificate:	Commercial	Age:	Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	BasicMed None	Last FAA Medical Exam:	June 26, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N4758C
Model/Series:	T210N	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	21063615
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	December 8, 2023 Annual	Certified Max Gross Wt.:	4016 lbs
Time Since Last Inspection:	11 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3588 Hrs	Engine Manufacturer:	Continental
ELT:	C126 installed, activated, aided in locating accident	Engine Model/Series:	TSIO-520-HcR
Registered Owner:	32EAGLE LLC	Rated Power:	310 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KF70,1350 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	08:35 Local	Direction from Accident Site:	360°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	18°C / 0°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Long Beach, CA (LGB)	Type of Flight Plan Filed:	None
Destination:	Murrieta, CA	Type of Clearance:	VFR
Departure Time:	07:50 Local	Type of Airspace:	Class E

## **Airport Information**

Airport:	FRENCH VALLEY F70	Runway Surface Type:	
Airport Elevation:	1349 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing;Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	33.560556,-117.13027

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#### **Administrative Information**

Investigator In Charge (IIC): Hicks, Michael

Additional Participating Persons:

Original Publish Date: February 13, 2025

Last Revision Date:

Investigation Class: Class 3

Note: The NTSB did not travel to the scene of this accident.

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=106646

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.

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