Aviation Investigation Final Report

Location:	EUREKA, Nevada	**Accident Number:**	LAX96LA216
Date & Time:	May 31, 1996, 09:28 Local	**Registration:**	N4674W
Aircraft:	Rockwell 112TCA	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Ferry		

Analysis

The pilot reported that he performed a preflight inspection of the airplane; no water or foreign material was observed in the fuel, and he started the engine without difficulty. After performing a run-up during which no anomalies were observed, the pilot commenced taking off from the gravel road. The airplane climbed 50 feet above the road, and then a total loss of engine power was experienced. The available roadway was not suitable for the pilot to use in terminating the flight, and the airplane crashed into nearby rough terrain. A witness reported that during the takeoff the airplane's engine sputtered and a plume of black colored exhaust smoke was noted. The airplane was recovered from the accident site and examined by an FAA inspector. The FAA inspector reported that over 40 gallons of fuel was found in the tanks, compression was measured in all cylinders, the spark plugs appeared in new condition but were heavily sooted, and the magnetos rotated and produced spark. In summary, all examined items looked normal or were impact damaged. No evidence of a mechanical malfunction was found.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a loss of engine power for undetermined nonmechanical reasons. A contributing factor was the lack of suitable terrain for use during an aborted takeoff.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
2. (F) TERRAIN CONDITION - NONE SUITABLE
3. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

On May 31, 1996, at 0928 hours Pacific daylight time, a Rockwell International 112TCA, N4674W, registered to D & M Terrazzo & Tile Co., Inc., experienced a total loss of engine power during takeoff from a gravel road, about 35 miles southwest of Eureka, Nevada. The airplane crashed into rough terrain adjacent to the road and was substantially damaged as it slid to a stop while in a yawed attitude. The airline transport certificated pilot was not injured. Visual meteorological conditions prevailed. No flight plan was filed for the ferry flight which was originating at the time of the accident.

According to the pilot, about 1 week prior to the accident flight, the airplane's owner made a precautionary landing on the road due to inclement weather. During rollout, the airplane collided with a post which resulted in minor skin damage to the right wing. The pilot further indicated that he is an aircraft mechanic, with inspection authorization, and he made temporary repairs to the airplane which were adequate for a ferry flight.

Thereafter, he performed a preflight inspection which included draining the fuel sumps. No water or foreign material was observed. The engine was started without difficulty, and no anomalies were observed during the run-up. The takeoff was commenced in a downhill direction, and full engine power was initially developed. According to the pilot, when the airplane was 50 feet above ground level, the engine lost power.

A witness reported observing the accident flight to the White Pine County Sheriff's Department. According to the witness, during the takeoff the airplane's engine sputtered and a plume of black colored exhaust smoke was noted.

The airplane was recovered from the accident site and examined by an Federal Aviation Administration (FAA) inspector. In summary, the FAA inspector reported that the magnetos were turned and sparked. The spark plugs looked new, but were heavily sooted. The crankshaft rotated and compression was measured in all cylinders. Over 40 gallons of fuel was found in the tanks. The throttle body was observed to have impact damage.

Pilot Information

Certificate:	Airline transport; Flight instructor	**Age:**	51,Male
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:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	November 8, 1994
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	5500 hours (Total, all aircraft), 50 hours (Total, this make and model), 5012 hours (Pilot In Command, all aircraft), 32 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	**Registration:**	N4674W
Model/Series:	112TCA 112TCA	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	13250
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	August 1, 1995 Annual	**Certified Max Gross Wt.:**	2950 lbs
Time Since Last Inspection:	70 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	2334 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	TO-360-C1A6D
Registered Owner:	D & M TERRAZZO & TILE CO., INC	**Rated Power:**	210 Horsepower
Operator:	WALTER R. ROBINETTE	**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	50 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	0°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		**Type of Flight Plan Filed:**	None
Destination:	TWIN FALLS , ID (TWF)	**Type of Clearance:**	None
Departure Time:	09:27 Local	**Type of Airspace:**	Class G

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	
Runway Length/Width:		**VFR Approach/Landing:**	

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:**	39.819263,-116.189216(est)

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne
Additional Participating Persons:	MICHAEL DORRIS; RENO , NV
Original Publish Date:	December 16, 1996
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=29458