Aviation Investigation Final Report

Location:	SANTA ROSA, New Mexico	**Accident Number:**	FTW96LA317
Date & Time:	July 25, 1996, 10:07 Local	**Registration:**	N1874J
Aircraft:	Rockwell 112TC	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The climb to a cruising altitude of 15,500 feet msl was normal. After approximately 10 to 15 minutes at cruise altitude, the airplane's engine 'abruptly' lost total power, and an attempt to restart the engine was unsuccessful. The pilot maneuvered to land to the west into the wind on interstate 40. While on short final, a tanker truck pull into the clear area that he had intended to land. He then turned the airplane to the right, and intentionally stalled it into some trees and bushes next to the interstate. The airplane was destroyed by a postimpact fire. Examination of the airplane and engine did not disclose any maintenance anomalies which would have resulted in the loss of power. Fuel samples were taken at the fueling facility where the airplane had last refueled. No contamination was found. A test run of the engine and an examination and flow test of the carburetor were accomplished. 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: loss of engine power for undetermined reason(s). The lack of suitable terrain for a forced landing was a related factor.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE - NORMAL

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING

Findings
2. (F) TERRAIN CONDITION - NONE SUITABLE
3. OBJECT - TREE(S)
4. TERRAIN CONDITION - HIGH VEGETATION

Factual Information

On July 25, 1996, at 1007 mountain daylight time, a Rockwell 112TC, N1874J, registered to and operated by a private owner as a Title 14 CFR Part 91 personal flight, was destroyed during a forced landing, following a loss of engine power near Santa Rosa, New Mexico. The airplane was consumed by a post crash fire. Visual meteorological conditions prevailed, and a flight plan was not filed. The private pilot, sole occupant of the airplane, was seriously injured. The flight originated from Albuquerque, New Mexico, about 50 minutes before the accident.

The pilot reported the following information to the investigator-in-charge. He was on a flight from Coronado Airport, Albuquerque, New Mexico, to Addison Airport, Dallas, Texas. Shortly after takeoff he contacted Albuquerque (ABQ) approach control for flight following. The climb to cruising altitude was normal. After leveling off at 15,500 feet MSL he "set the airplane up for cruise and switched the fuel selector from "both" to the right tank." After approximately 10 to 15 minutes, the airplane's engine "abruptly" lost power, and an attempt to restart the engine was unsuccessful. He contacted ABQ and advised them of his situation, and requested information on the nearest airport. ABQ reported the nearest airport was at Santa Rosa, New Mexico. He advised ABQ he could not reach the airport, and was subsequently given a heading to Interstate 40. As the airplane descended, attempts to restart the engine were unsuccessful. He set up to land to the west into the wind on the Interstate, and while on short final a tanker truck pulled into the clear area where he intended to land. He then turned the airplane to the right, and intentionally stalled it into some trees and bushes next to the Interstate.

The pilot also reported that during the attempted engine restarts the mixture control appeared to have little resistance. Examination of the mixture control by the FAA inspector revealed the cable was not disconnected between the carburetor and the mixture control lever.

Witnesses reported that while driving along interstate 40 they observed an airplane "dipping up and down" like it was attempting to land. The airplane struck a tree breaking off its "tail," and it "went behind the tree and a large fireball erupted." One of the witnesses and two truck drivers pulled the pilot from the burning airplane.

Examination of the airplane and engine by the FAA inspector at the accident site did not disclose any maintenance anomalies which would have resulted in the loss of power. The engine was removed from the wreckage and sent to the manufacturer for further examination. Fuel samples were taken at the fueling facility where the airplane was last fueled. There was no contamination found.

An engine examination and test run was accomplished on November 12, 1996. Several damaged parts were either replaced or repaired prior to the test run. The first attempted start was unsuccessful due to fuel "pouring" from the carburetor. The carburetor was sent to

Precision Airmotive Corporation for further examination. After installing a slave carburetor the engine was started. A magneto check was performed. The right magneto drop was not acceptable. This large drop was due to the cut #2 and #4 top ignition leads. The engine was accelerated to 34 inches manifold pressure when fuel began spraying from around the mating area between the carburetor air inlet adapter flange and the oil sump carburetor air inlet attaching pad. "The flange area that was allowing the fuel and manifold pressure loss is the carburetor air inlet adapter flange that was broken off during the accident and repaired." See the enclosed engine test report.

An examination and flow check of the carburetor was accomplished on November 27, 1996. Initial flow test resulted in flooding. Examination of the carburetor revealed the metal float's sides were expanded approximately .2 inches, and the float height measured approximately .080 inches. The height should be .187 inches. There was a mark inside of the float bowl, possibly from float contact. There was a small amount of material which appeared to be molten plastic running in from the air inlet and puddling against the edge of the venturi. A serviceable float was installed, and the float height was adjusted. The subsequent flow test was within tolerance. See the enclosed carburetor examination and flow check report.

Pilot Information

Certificate:	Private	**Age:**	66,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	September 22, 1994
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	1060 hours (Total, all aircraft), 805 hours (Total, this make and model), 1040 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rockwell	**Registration:**	N1874J
Model/Series:	112TC 112TC	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	13033
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	February 1, 1996 Annual	**Certified Max Gross Wt.:**	2300 lbs
Time Since Last Inspection:	20 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1940 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	TO-360-C1A6D
Registered Owner:	CHARLES L. PIFER	**Rated Power:**	210 Horsepower
Operator:		**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**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	270°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	27°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ALBEQUERQUE , NM (ABQ)	**Type of Flight Plan Filed:**	None
Destination:	DALLAS , TX (ADS)	**Type of Clearance:**	VFR on top
Departure Time:	09:30 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:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Serious	**Latitude, Longitude:**	34.940635,-104.670211(est)

Administrative Information

Investigator In Charge (IIC):	Wigington, Douglas
Additional Participating Persons:	ANDY L MOORE; ALBEQUERQUE , NM GERALD R JAMES; WILLIAMSPORT , PA
Original Publish Date:	April 15, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=19921