



# Aviation Investigation Final Report

<b>Location:</b>	LAREDO, Texas	<b>Accident Number:</b>	FTW99LA174
<b>Date &amp; Time:</b>	June 27, 1999, 16:28 Local	<b>Registration:</b>	N8329M
<b>Aircraft:</b>	Piper PA-34-220T	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

During descent for landing, the twin-engine airplane lost power in both engines due to fuel exhaustion. The pilot reported that during his preflight inspection, the fuel gauges were reading a little over 30 gallons on the left and about 35 gallons on the right. When the flight neared its destination, the pilot started a descent for landing. As he 'pitched' the nose down, the left gauge went to zero. A few minutes later, the right gauge went from about 20 gallons to zero, and a few seconds later, the right engine lost power, followed by the left engine. A forced landing was initiated to a nearby road; however, after observing traffic on the road, the pilot elected to land in the grass area next to the road. After touchdown, the right wing impacted a metal fence post, and the aircraft came to rest nose down in a ditch. Examination of the fuel system by an FAA inspector revealed no usable fuel in the left fuel tank, and the right fuel tank was destroyed. There was no evidence of fuel spillage at the accident site. The pilot reported that he could have prevented this accident by adding an 'extra 10 gallons' of fuel.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to refuel, which resulted in a total loss of engine power due to fuel exhaustion. A factor was the lack of suitable terrain for the forced landing.

## Findings

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

Findings

1. ALL ENGINES
2. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND
3. (C) FLUID,FUEL - EXHAUSTION

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

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Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

4. (F) TERRAIN CONDITION - NONE SUITABLE
5. OBJECT - FENCE POST

## Factual Information

On June 27, 1999, at 1628 central daylight time, a Piper PA-34-220T twin-engine airplane, N8329M, registered to and operated by C&S ADTD Aviation, Inc., of San Antonio, Texas, was substantially damaged during a forced landing following a loss of engine power near Laredo, Texas. The instrument rated commercial pilot and the two passengers were not injured. Visual meteorological conditions prevailed, and an IFR flight plan was filed for the 14 Code of Federal Regulations Part 91 personal flight. The flight originated from San Antonio, Texas, at 1535, with a destination of Laredo.

The pilot reported in the Pilot/Operator Aircraft Accident Report, NTSB Form 6120.1/2, that during his preflight inspection, the fuel gauges were reading a little over 30 gallons on the left and about 35 gallons on the right. The pilot further reported that when the flight was a few miles south of Cotulla, he started a descent for landing at Laredo. As he "pitched" the nose down, the left fuel gauge went to zero. "I didn't think we could be burning that much avgas so I assumed it was a gauge problem." A few minutes later the right gauge went from about 20 gallons to zero, and a few seconds later, the right engine lost power and then the left engine lost power. The pilot initiated a forced landing to a nearby road; however, after observing traffic on the road, he elected to land on the grass area next to the road. After touchdown, the right wing impacted a metal fence post, and the aircraft came to rest nose down in a ditch. The pilot stated that he could have prevented this accident by adding an "extra 10 gallons" of fuel.

Examination of the wreckage by the FAA inspector revealed a partial separation of the right wing and damage to both propellers. Examination of the fuel system revealed no usable fuel in the left fuel tank, and the right fuel tank was destroyed. There was no evidence of fuel spillage at the accident site.

## Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	25, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical—no waivers/lim.	<b>Last FAA Medical Exam:</b>	April 9, 1998
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1722 hours (Total, all aircraft), 54 hours (Total, this make and model), 1640 hours (Pilot In Command, all aircraft), 185 hours (Last 90 days, all aircraft), 54 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N8329M
<b>Model/Series:</b>	PA-34-220T PA-34-220T	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	34-8133009
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	March 26, 1999 Annual	<b>Certified Max Gross Wt.:</b>	4750 lbs
<b>Time Since Last Inspection:</b>	54 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	4310 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	TSIO-360-KB
<b>Registered Owner:</b>	C&S ADTD AVIATION, INC.	<b>Rated Power:</b>	220 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	140°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	35°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	SAN ANTONIO , TX (SAT )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	(LRD )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	15:35 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	27.510581,-99.499038(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Wigington, Douglas
<b>Additional Participating Persons:</b>	WAYNE C RADICKE; SAN ANTONIO , TX
<b>Original Publish Date:</b>	November 30, 2000
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=46661">https://data.nts.gov/Docket?ProjectID=46661</a>

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