



Aviation Investigation Final Report

Location:	Ozona, Texas	Accident Number:	FTW02LA018
Date & Time:	October 19, 2001, 21:20 Local	Registration:	N8642Y
Aircraft:	Piper PA-30	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

During dark night light conditions, the pilot landed the airplane on an unlighted runway, taxied to the ramp, boarded the passengers, and taxied for the departure flight. The pilot had not refueled the airplane en route and fuel was not available at this airport. En route at 9,500 msl, the pilot requested and received VFR flight following to the planned refueling destination. Subsequently, the pilot decided to land the airplane for refueling at an en route airport. The pilot reported that he tried to activate the non-towered airport's runway lights and "there were no lights or rotating beacon operating at the airport." After approximately 20-30 minutes of flying over the town and looking for the airport, the left engine lost power, and the pilot feathered the left engine. Subsequently, the right engine lost power. The pilot performed the emergency landing procedures to a vacant lot, and during the approach, the airplane struck power lines. The pilot reported dark night light conditions, clear skies, visibility 30 miles with no restrictions to visibility, and calm wind. No evidence of fuel was found in either the area surrounding the accident site or in the aircraft's fuel tanks. No mechanical discrepancies were found that indicated the engines were incapable of producing power prior to the impact. A preset timer operates the runway lights at the low intensity and the taxiway lights; however, the intensity of the runway lights may be changed when the pilot keys the airplane microphone over the CTAF. Witnesses, the acting airport manager, and the FAA reported the runway lights and the rotating beacon were operational.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power due to fuel exhaustion resulting from the pilot's failure to refuel the airplane. Contributing factors were the lack of suitable terrain for the forced landing and the dark night conditions.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

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

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

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

4. (F) TERRAIN CONDITION - NONE SUITABLE
5. OBJECT - WIRE, TRANSMISSION
6. (F) LIGHT CONDITION - DARK NIGHT

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

7. TERRAIN CONDITION - GROUND

Factual Information

On October 19, 2001, at 2120 central daylight time, a Piper PA-30, twin engine airplane, N8642Y, struck transmission lines and the terrain during a forced landing following a loss of engine power near Ozona, Texas. The airplane was owned and operated by a private individual under 14 Code of Federal Regulations Part 91. The airline transport pilot and the three passengers received serious injuries. The airplane sustained substantial damage. Dark night visual meteorological conditions prevailed for the cross-country flight with a planned refueling stop at San Angelo, Texas. The personal flight departed Lajitas, Texas, approximately 2020.

Witnesses located at the Lajitas Airport, reported that the airplane landed at Lajitas at 1930, on the unlighted 4,500-foot asphalt runway 04. One witness stated that sunset occurred at 1918, with dark night (1/4 moonlight) conditions. Skies were clear with a light breeze. Witnesses/local authorities reported that the airplane departed the airport to the east and climbed to the east/northeast.

The pilot reported that he flew the airplane from the Addison Airport, Dallas, Texas, to Lajitas, Texas, where the three passengers boarded the airplane for the return flight to Fort Worth. Fuel was not available at Lajitas. During the takeoff initial/climb, the pilot maintained full power on the engines until reaching cruise altitude. En route, at 9,500 feet msl, the pilot requested and received flight following from Albuquerque Air Route Traffic Control Center (ABQ ARTCC) and Houston ARTCC. When the flight was in the vicinity of the Ozona Municipal Airport, the pilot made a decision to land the airplane and refuel. The pilot reported that he tried to activate the pilot controlled runway lights on a frequency of 122.8 Megahertz (KHz) and "there were no lights or rotating beacon operating at the airport." After approximately 20 minutes of flying over Ozona and looking for the airport north of town, the left engine lost power due to fuel starvation. The pilot secured the left engine. Approximately 10 minutes later, the right engine lost power due to fuel starvation. Upon seeing a vacant lot, the pilot initiated the emergency landing procedures and extended the landing gear. During the approach, the upper portion of the vertical stabilizer struck power lines, the airplane nosed down, and subsequently, the airplane slid to a stop in the vacant lot.

Local authorities at Ozona reported that the night was "clear with light wind." The pilot reported dark night light conditions, clear skies, visibility 30 miles with no restrictions to visibility, and the wind calm. The utility company reported the power outage occurred about 2120.

A review of the Houston Air Route Traffic Control Center (ARTCC) data revealed that at 2049:55, when Houston ARTCC received a handoff from Albuquerque ARTCC, the airplane was approximately 47 nautical miles from Lajitas at latitude 29 degrees 04.06 minutes North, longitude 103 degrees 02.06 minutes West. The flight altitude readout was 9,500 feet with an

en route ground speed of 150 knots. At 2106, the aircraft was approximately 25 nautical miles from Ozona, Texas, when the pilot informed the controller that he would land the airplane at Ozona and refuel. At 2112, the airplane, at an altitude of 7,000 feet msl, was approximately 18 nautical miles from Ozona, when the Houston ARTCC controller tried to contact the pilot to terminate the flight following procedures and clear the pilot for a frequency change; however, the pilot did not respond. The controller continued to track the aircraft, and at 2017:21, the airplane, at an altitude of 4,000 feet msl (1,500 feet agl) was approximately 8 nautical miles from Ozona.

At the time of the accident, the airline transport rated pilot held airplane multiengine, single-engine, and instrument ratings. The pilot held a third class medical certificate, issued on August 24, 2000, with no limitations. On the Pilot/Operator Aircraft Accident Report (NTSB 6120.1/2) the pilot reported 2,879.4 hours of accumulated flight time, of which 1,510.1 hours was in multiengine airplanes. The pilot reported 607.8 hours of accumulated flight time in the make and model of the accident airplane, of which 11.4 was in the previous thirty days. The pilot's last biennial flight review was performed in September 2001 in a single-engine airplane.

A review of the maintenance records and FAA data by the FAA inspector revealed that the 1968 model Piper PA-30, serial number 30-1784, was purchased by the current owner on October 17, 2001. Both engines were Lycoming model IO-320-C1A, and each engine was equipped with the Hartzell propeller, model HC-E2YL-2BSF. The records indicated that the aircraft had accumulated 5,509.3 hours, the left engine 1,514.5 hours since major overhaul, and the right engine time 5,509.3 hours when the most recent annual inspection was performed on June 14, 2001.

The Ozona Municipal Airport (OZA), located approximately 1 mile north of Ozona, is owned and operated by the City of Ozona, Texas. Airport elevation is 2,381 feet. OZA is a non-towered airport with a single runway (runway 16/34). Runway 16/34 is an asphalt runway, 6,000 feet long, and 75 feet wide. A preset timer operates the runway lights at the low intensity and the taxiway lights; however, the intensity of the runway lights may be changed when the pilot keys the airplane microphone over the common traffic advisory frequency (CTAF) 122.8 KHz.

Witnesses, located at and in the vicinity of the Ozona Municipal Airport, reported the runway lights were on at the time they observed the airplane maneuvering near the airport. One witness stated to the best of her knowledge "all lights on [the] runway and [the rotating] beacon were working." On October 21, 2001, the FAA inspector observed the operation of the runway lights (frequency 122.8 KHz) and the rotating beacon. He reported the runway lights and beacon were operational.

Local authorities and the FAA inspector, responding to the site, found the airplane approximately 1 1/4 mile south and 1/4 mile west of the airport runway, resting upright in a parking lot approximately 100 feet beyond downed transmission lines. The upper 6 inches of the vertical stabilizer exhibited striations consistent with the size of the transmission cables. The right engine was separated from the firewall. The left propeller was feathered and the

right propeller exhibited "no evidence of power." One main landing gear was found approximately 6 feet prior to the resting position of the airplane. No evidence of fuel was found in either the area surrounding the accident site or in the aircraft's fuel tanks. No mechanical discrepancies were found that would have prevented operation of the airplane prior to the accident.

Pilot Information

Certificate:	Airline transport	Age:	52, 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):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	August 24, 2000
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 10, 2001
Flight Time:	2879 hours (Total, all aircraft), 608 hours (Total, this make and model), 2748 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N8642Y
Model/Series:	PA-30	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	30-1784
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	June 14, 2001 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	5509.3 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	IO-320-C1A
Registered Owner:	Sheila M. Arthur	Rated Power:	160 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	SJT,1919 ft msl	Distance from Accident Site:	54 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	35°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	20°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lajitas, TX (17XS)	Type of Flight Plan Filed:	None
Destination:	San Angelo, TX (SJT)	Type of Clearance:	VFR flight following
Departure Time:	20:20 Local	Type of Airspace:	Class E

Airport Information

Airport:	Ozona Municipal OZA	Runway Surface Type:	Asphalt
Airport Elevation:	2381 ft msl	Runway Surface Condition:	Dry
Runway Used:	16	IFR Approach:	None
Runway Length/Width:	6000 ft / 75 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	3 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 Serious	Latitude, Longitude:	30.735277,-101.203056

Administrative Information

Investigator In Charge (IIC):	Roach, Joyce
Additional Participating Persons:	Rick J Gorry; FAA FSDO; San Antonio, TX
Original Publish Date:	April 8, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=53641

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