

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN21LA418

INVESTIGATION SUMMARY

November 1, 2021

TABLE OF CONTENTS

A. ACCIDENT	3
B. INVESTIGATION SUMMARY	3
C. SUMMARY	3
D. DETAILS OF THE INVESTIGATION	3
1.0 PILOT STATEMENTS	3
2.0 FAA SUMMARY	4
3.0 ACCIDENT SITE	5
4.0 AIRPLANE EXAMINATION	6
5.0 FUEL CALCULATIONS	7

A. ACCIDENT

Location: Magnolia, Texas
Date: September 12, 2021
Time: 1052 central daylight time
Airplane: Piper PA-44-180, N740FT

B. INVESTIGATION SUMMARY

IIC Joshua Lindberg
National Transportation Safety Board
Dallas, Texas

Party Coordinator Jeffrey Hayes
Federal Aviation Administration (FAA)
Houston, Texas

C. SUMMARY

Preliminary information: On September 12, 2021, at 1052 central daylight time, a Piper PA-44 airplane, N740FT, was substantially damaged when it was involved in an accident near Magnolia, Texas. The pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

D. DETAILS OF THE INVESTIGATION

1.0 Pilot Statements

NTSB duty officer record of conversation with the pilot on September 14, 2021: The pilot stated that during the preflight inspection, the left fuel gauge indicated 17 gallons and the right gauge flickered between zero and 17 gallons. Upon visual inspection of the fuel tanks, he confirmed that both tanks contained fuel. After takeoff, he climbed to 2,000 ft mean sea level (msl) and proceeded to the destination airport where he completed a full stop landing. Departed DWH, flew to Navasota for a full stop landing and takeoff. About 10 minutes into the return flight, the left engine experienced a loss of power, then 5 minutes later the right engine experienced a loss of power. About 40-minute flight time, not including engine runup and time taxiing.

NTSB IIC record of conversation with the pilot on September 20, 2021: He left the Air Force in 1998 flew mostly C-130. Hasn't flown civilian planes until about 1 year ago. Started flight training at West Houston Airport training in Cessna 172 for about 8 flights. Accumulated about 20 to 30 hours in the last year, which were in a

Cessna 172, a Diamond DA40, and Piper Seminole. On the day of the accident, he stated that he departed from DWH and was flying to 60R. He completed 1 full stop landing then proceeded back to DWH. On the return flight, the left engine quit so he secured it. Then right engine quit, and he secured it. Made a forced landing to a road and collided with trees. During the preflight inspection, left tank showed 17 gals. Right tanks flickered but showed about 17 gals. Looked in both tanks and observed fuel. Left engine dipstick couldn't unscrew so he called a mechanic.

The pilot provided a written statement and which stated:
"Departed KDWH at approximately 9:45 am. Flew at 2,000 MSL to Navasota Airport and executed a single landing to full stop. Departed Navasota for KDWH at 2,000 MSL. About 10 minutes from Navasota, left engine wound down. Completed Secure Engine checklist. Attempted in flight restart. Did not restart. About 5 minutes later, right engine wound down. I looked for a place to land. Very wooded and no fields available. I steered for closest field and slowed to approximately 80 knots. Descent did not allow me to reach the field. I tried to clear a final tree and land on a road. Aircraft impacted a large oak tree and came to rest about 30 feet past the tree. No injuries to pilot."

The pilot provided a fuel calculation which stated:
"Planned flight was for 1.0 hours. Burn planning was based experience in this airframe on a 1.5 hour flight on 8/7/2021 that consumed 24 pounds of fuel. For the 9/12 flight I used 20 lbs/hr burn rate. This required:
- 20 lbs for flight
- 10 lbs reserve
- 4 lbs unusable"

2.0 FAA Summary

September 12, 2021, 1128 local, received call from SW Comm Center (ROC). At approximately 1030 local, N740FT, Piper Seminole (PA-44-180), enroute DWH due to a rough running engine. At 2000ft the left engine went out and then the right engine also failed. Pilot attempted to land on the street but ended up hitting a tree.

Brought onto call, Deputy Munson, Montgomery County Sheriff's Department. Per Deputy Munson: One person on board, and no injuries; Pilot is Jay Esmay; Aircraft departed Hooks at approximately 0930, flew to Navasota, landed and took off headed back to Hooks; At 2,000 ft. left engine quit, pilot tried to restart for 10 minutes, right engine went out; pilot attempted to land in an open field but could not make it to the field so diverted to land in the street; aircraft hit an oak tree and crashed onto residential driveway. Because of tree debris, Deputy Munson unsure of additional property damage. Deputy Munson described aircraft damage and provided pictures via text message. Deputy Munson/Chuck Grant (Montgomery County Fire Dept.) confirmed no presence of fuel on ground. Mr. Grant advised of

owner and mechanic on site and requested permission to shut off the ELT. Authorization granted.

Called pilot, Jay Esmay: Pilot confirmed he was the only occupant of the aircraft and sustained no injuries. Pilot explained ten minutes out of Navasota, the left engine quit. Pilot stated he went through the checklist and attempted to restart the engine. Pilot stated ten minutes later, the right engine quit. Pilot stated he attempted restart of right engine but unsuccessful. Pilot stated he located an empty field to land the aircraft in. When it appeared he did not have altitude/airspeed to make it to the field, he diverted to land in the street. The aircraft impacted the upper portion of an oak tree and came to rest in a residential driveway.

Upon arrival on scene, met by aircraft owner, Myron Hewlett. At initial meeting, Mr. Hewlett stated that the pilot ran the aircraft out of fuel. Mr. Hewlett stated he and his mechanic, Sammy Garcia, checked fuel tanks and observed zero fuel in them.

On scene, met with pilot, Jay Esmay. Observed red mark on left chest area. Pilot confirmed mark as bruising from seat belt. Pilot also reported slight bump on forehead, but no other injuries. Discussed event with pilot. Pilot described again all that was previously stated on telephone call. Pilot stated he departed Hooks and flew to Navasota where he completed some touch-and-go landings with a full-stop landing. Asked pilot if he fueled the aircraft. Pilot stated he checked aircraft fuel status on pre-flight and determined there was approximately 17 gallons in each tank. Pilot also used hand gestures to describe how much fuel he visibly determined to be in the fuel tanks.

Aircraft sustained significant damage and appears to be destroyed. Left main landing gear is partially extended. Right main landing gear and nose landing gear are not visible. Landing gear selector is in the "Up" position. The left fuel tank was inspected for integrity and the presence of fuel. The left fuel tank appears to be intact with no fuel inside the tank. The right fuel tank was inspected for integrity and the presence of fuel. The right fuel tank appears to be intact with no fuel inside the tank. The two propeller blades on the left engine are feathered with no visible damage. The two propeller blades on the right engine are feathered with no visible damage to one propeller blade and a bend at the tip of the other propeller blade. There is some oil leakage from the bottom of the right engine. No visible leakage of fluids from left engine. While on scene, owner painted over N-number with white paint. Authorization granted to remove aircraft.

There were no witnesses to the accident. The property owners of the driveway where the aircraft came to rest have security cameras on property. Property owners stated they would review footage and provide via email if the crash was captured on video."

3.0 Accident Site

The airplane impacted trees in a residential area and came to rest on a driveway. See photos below.



Figure 1. Front of the airplane at the accident site (Source: FAA)



Figure 2. Overall view of the accident site (Source: FAA)

4.0 Airplane Examination

The responding Federal Aviation Administration (FAA) inspector reported that the airplane sustained substantial damage to the fuselage, empennage, and both wings. The fuel tanks were not breached during the accident sequence and neither tank contained evidence of fuel.

A mechanic for Texas Flight examined both engines and fuel systems. The mechanic recorded two videos of the fuel inspection, which are included in the public docket for this investigation. The videos details that there was no fuel found in either fuel tank, about 4 to 6 oz of fuel was drained from the left carburetor and there was no fuel in the right carburetor. There were no preimpact anomalies that would have precluded normal operation.

5.0 Fuel Calculations

Based on the airplane owners dispatch sheets and fueling information from the owner, the following fuel consumption calculation was made. The exact fuel consumption rate would vary between each flight; therefore, an exact fuel calculation was not possible. At a fuel consumption rate of 17 GPH (according to the operator), there would have been about 1.48 gallons of fuel left in the tanks. The airplane should have had 2 gallons of unusable fuel.

N740FT Fuel consumption calculation						
Previous flights			Total			
	Time (hrs)	Time (mins)	Fuel (gals)	GPH	Fuel added	Gals remaining
Unusable fuel			2		48.4	110
9/8/21 Esparaza	2.5	150	42.5	17		67.5
9/9/21 Fueled but no flight	-	-	-		30.2	97.7
9/9/21 Mx flight	1.3	78	22.1	17	-	75.6
9/10/21 Esparaza check ride	1.9	114	32.3	17	-	43.3
9/11/21 Graham	1.7	102	28.9	17	-	14.4
9/12/21 Accident flight	0.76	46	12.92	17	-	1.48
Total	5.66	340				

Note: The fuel consumption rate of 17 GPH was used since it accounted for the time the airplane taxied and was not in cruise flight. The accident flight time of 46 minutes was used to account for the entire operation and not just the ADS-B flight time.

Submitted by:

Joshua Lindberg
NTSB IIC