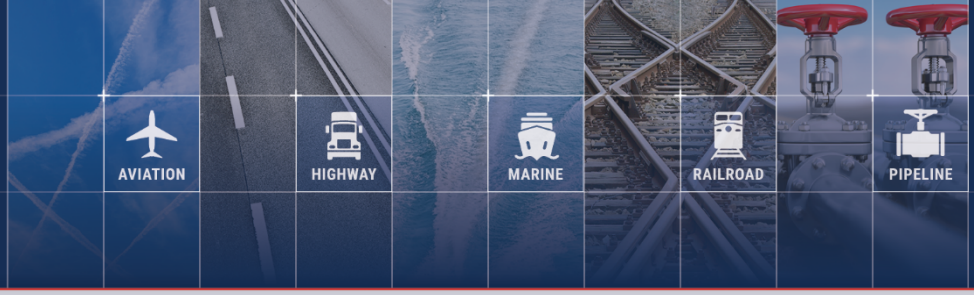

Aviation Investigation Final Report

Location:	Taylor, Texas	**Accident Number:**	DFW07CA202
Date & Time:	September 16, 2007, 22:30 Local	**Registration:**	N6017P
Aircraft:	Piper PA-24-180	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The 2,000-hour private pilot reported that his single-engine airplane lost power while at altitude of 8,000 feet MSL during a night VFR flight. As a precaution, the pilot elected to initiate the descent to his destination airport after successfully restarting the engine. While descending to the airport, the engine lost power a second time and the pilot elected to perform a gear-up forced landing to an open field 2 nautical miles north east of his intended destination. Additionally, the pilot noted that the right fuel gauge indicated one-fourth full and the left fuel gauge indicated an unknown low amount of fuel. The airplane sustained structural damage during the forced landing. The 3 occupants reported that they were able to egress from the airplane unassisted. Having flown this route multiple times, the pilot stated that he always landed with 45 minutes of fuel in reserve. The pilot added that the fuel gauges on his airplane were usually accurate and he was unaware of his low fuel condition until after the engine lost power the second time. The FAA investigators that responded to the accident site reported that both the left and right fuel tanks had been exhausted. Weather at the destination airport 5 minutes after the mishap was reported as calm winds, visibility 10 statute miles, with clear skies, temperature 23 degrees Celsius, dew point 18 degrees Celsius, and altimeter 30.08 inches of Mercury.

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 as result of the pilot's inadequate in-flight planning/decision. Contributing factors were the lack of suitable terrain for the forced landing and the dark night.

Findings

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

Findings
1. (F) LIGHT CONDITION - DARK NIGHT
2. FUEL CONSUMPTION CALCULATIONS - NOT CALCULATED - PILOT IN COMMAND
3. (C) FLUID,FUEL - EXHAUSTION
4. FUEL SYSTEM - MISJUDGED - PILOT IN COMMAND
5. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND
6. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND

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

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

Findings
7. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

The 2,000-hour private pilot reported that his single-engine airplane lost power while at altitude of 8,000 feet MSL during a night VFR flight. As a precaution, the pilot elected to initiate the descent to his destination airport after successfully restarting the engine. While descending to the airport, the engine lost power a second time and the pilot elected to perform a gear-up forced landing to an open field 2 nautical miles north east of his intended destination. Additionally, the pilot noted that the right fuel gauge indicated one-fourth full and the left fuel gauge indicated an unknown low amount of fuel. The airplane sustained structural damage during the forced landing. The 3 occupants reported that they were able to egress from the airplane unassisted. Having flown this route multiple times, the pilot stated that he always landed with 45 minutes of fuel in reserve. The pilot added that the fuel gauges on his airplane were usually accurate and he was unaware of his low fuel condition until after the engine lost power the second time. The FAA investigators that responded to the accident site reported that both the left and right fuel tanks had been exhausted. Weather at the destination airport 5 minutes after the mishap was reported as calm winds, visibility 10 statute miles, with clear skies, temperature 23 degrees Celsius, dew point 18 degrees Celsius, and altimeter 30.08 inches of Mercury.

Pilot Information

Certificate:	Private	**Age:**	58,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Front
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 None	**Last FAA Medical Exam:**	December 1, 2005
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	December 1, 2004
Flight Time:	2000 hours (Total, all aircraft), 500 hours (Total, this make and model), 2000 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N6017P
Model/Series:	PA-24-180	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	24-1112
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	November 1, 2006 100 hour	**Certified Max Gross Wt.:**	2550 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	3830 Hrs as of last inspection	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-360-A1A
Registered Owner:	Charles D. & Heath E. Wiseman	**Rated Power:**	180 Horsepower
Operator:	Charles D. Wiseman	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night
Observation Facility, Elevation:	T74	**Distance from Accident Site:**	
Observation Time:	22:53 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	3 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	170°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.06 inches Hg	**Temperature/Dew Point:**	23°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Greenwood , IN (81N2)	**Type of Flight Plan Filed:**	VFR/IFR
Destination:	Taylor, TX	**Type of Clearance:**	Unknown
Departure Time:	18:00 Local	**Type of Airspace:**	

Airport Information

Airport:	TAYLOR MUNI T74	**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing;Straight-in

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:**	30.570278,-97.439163

Administrative Information

Investigator In Charge (IIC):	Yeager, Leah
Additional Participating Persons:	Harry Kifer; San Antonio, Texas
Original Publish Date:	December 20, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=66686