



National Transportation Safety Board Aviation Accident Final Report

Location:	COLBERT, GA	Accident Number:	ATL99LA037
Date & Time:	01/02/1999, 1601 EST	Registration:	N7295P
Aircraft:	Piper PA-24-250	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The preflight inspection of the fuel tanks by the pilot revealed the tanks were filled to the bottom of the filler neck, which the pilot believed was appropriately full. After starting the engine, fuel began leaking from the fuel sump drain hose. The pilot operated the spring loaded valve handle inside the airplane which apparently stopped the leak. Shortly after departing, the engine began running rough upon which the pilot began a deviation to another airport. During this time, the engine began running smoothly whereupon the pilot continued to his initial destination. During descent, the engine began running rough and the pilot decided the tanks had been exhausted. The pilot performed a forced landing causing substantial damage. The airplane cruising endurance based on 75% power and 90 gallons of fuel on board is 5.4 hours. However, the usable fuel capacity on this airplane when the fuel tanks are filled to the bottom of the filler necks is approximately 80 gallons. The actual flight time of this aircraft was 5.55 hours. A Federal Aviation Administration inspector who examined the airplane noted only residual fuel was found in the selector valve and no leaks were found in the fuel system.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Inadequate planning/decision by the pilot, which resulted in fuel exhaustion due to an inadequate supply of fuel.

Findings

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

Findings

1. (C) PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
2. (C) FLUID,FUEL - EXHAUSTION
3. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

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

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

4. (F) OBJECT - UNDETERMINED

Factual Information

On January 2, 1999, about 1601 Eastern Standard Time, a Piper PA-24-250, N7295P, collided with an unknown object during a forced landing near Colbert, Georgia. The airplane was operated by the owner under the provisions of Title 14 CFR Part 91, and Instrument Flight Rules (IFR). Instrument meteorological conditions prevailed at the accident site and an IFR flight plan was filed for the personal flight. There were no injuries to the commercial pilot and the airplane was substantially damaged. The flight originated at Allaire Airport in Belmar, NJ, at 1028 the same day destined for the Gwinnett County Airport, Lawrenceville, Georgia.

According to the pilot, the visual preflight inspection of the aircraft fuel tanks revealed that both tanks were filled to the bottom of the filler neck which the pilot believed was appropriately full (see attached flight manual). After starting the engine, fuel began leaking from the fuel sump drain hose. The pilot operated the spring loaded valve handle inside the airplane which apparently stopped the leak. No fuel was witnessed leaking from the drain hose thereafter. The pilot had estimated the flight would take close to five hours with anticipated head winds. Shortly after departing, according to the pilot, the engine began running rough upon which he began a deviation to another airport. During this time, the engine began running smoothly whereupon the pilot continued to his initial destination. According to the pilot, after an uneventful five hours of flight, during descent, the engine began running rough. The pilot stated, he decided the tanks had been exhausted and immediately asked Air Traffic Control for help to the nearest airport located in Athens, Georgia. After descending through the clouds at 600 feet, the pilot lowered the landing gear and applied full flaps. The airplane was landed on a wet and slightly downhill road. The pilot stated that the right wing hit something before the airplane settled over a drainage ditch along the side of the road (see attached Pilot/Operator Aircraft Accident Report).

The following airplane endurance approximations are based on data obtained in the Piper Airplane PA-24-250 Aircraft Information Manual: The airplane cruising endurance based on 75% power and 90 gallons of fuel on board is 5.4 hours. Note, this cruising range figure includes 45 minutes fuel reserve plus allowance for fuel used during taxi, takeoff, climb, and cruise at the stated power. The usable fuel capacity on this airplane when the fuel tanks are filled to the top of the filler necks is 90 gallons, however when the tanks are filled to the bottom of the filler necks, the approximated quantity of usable fuel is 80 gallons. The actual flight time of this aircraft was 5.55 hours.

According to a Federal Aviation Administration inspector who examined the airplane, four feet of the main right wing was torn off, the main landing gear was broken off, the left horizontal stabilizer was bent, and one propeller blade was bent. The inspector also noted that only residual fuel was found in the selector valve and no leaks were found in the fuel system.

Pilot Information

Certificate:	Commercial	Age:	59, Male
Airplane Rating(s):	Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	12/02/1997
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1478 hours (Total, all aircraft), 1000 hours (Total, this make and model), 1376 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7295P
Model/Series:	PA-24-250 PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	24-2474
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	06/17/1998, Annual	Certified Max Gross Wt.:	2900 lbs
Time Since Last Inspection:	40 Hours	Engines:	1 Reciprocating
Airframe Total Time:	5980 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-540
Registered Owner:	95 POPPA INC.	Rated Power:	250 hp
Operator:	JOSEPH J. FRIEND	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AHN, 802 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	1532 EST	Direction from Accident Site:	45°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	2.5 Miles
Lowest Ceiling:	Overcast / 600 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots / 22 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	0° C / -1° C
Precipitation and Obscuration:			
Departure Point:	ALLAIRE, NJ (BLM)	Type of Flight Plan Filed:	IFR
Destination:	LAWRENCEVILLE, GA (LZU)	Type of Clearance:	IFR
Departure Time:	1028 EST	Type of Airspace:	Class E

Airport Information

Airport:	ATHENS/BEN EPPS AIRPORT (AHN)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	Wet
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PRESTON E HICKS	Report Date:	04/25/2001
Additional Participating Persons:	PATRICK SCHIPPERT THOMAS SULLY SCOTT M GRABON		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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