



Aviation Investigation Final Report

Location:	Flagstaff, Arizona	Accident Number:	SEA07LA178
Date & Time:	June 23, 2007, 13:20 Local	Registration:	N7584P
Aircraft:	Piper PA 24-250	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The engine lost power during flight and the pilot force-landed the airplane in a field and collided with a fence. The pilot was intending to fly to an airport to purchase fuel. Prior to departure, the pilot assumed he had 20 gallons of fuel onboard. About 15 minutes into the flight, the engine lost power. Post accident examination of the fuel tanks revealed that there was no fuel present in the fuel tanks. In addition, there was no fuel staining or leakage evident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power during cruise flight due to fuel exhaustion, as a result of the pilot's failure to refuel and inadequate preflight planning.

Findings

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

Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

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

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

Findings

4. TERRAIN CONDITION - ROUGH/UNEVEN
5. OBJECT - FENCE

Factual Information

On June 23, 2007, at 1320 mountain standard time, a Piper PA 24-250, N7584P, lost engine power during cruise flight and force landed about 25 miles east of Flagstaff, Arizona. The pilot owned the airplane and was operating it under the provisions of 14 CFR Part 91. The private pilot and one passenger were not injured; the airplane sustained substantial damage. Visual meteorological conditions prevailed and no flight plan was filed. The pilot departed Flagstaff Pulliam Airport, Flagstaff, at 1300.

According to the pilot, he was intending to fly to Holbrook Municipal Airport, Holbrook, Arizona, to purchase fuel. Approximately 20 minutes into the flight, the engine lost power. The pilot switched from the left main fuel tank to the right main fuel tank; however, the engine did not regain power. The pilot then force-landed the airplane and collided with a fence.

The pilot reported in a written statement that he was intending to purchase fuel. He checked the fuel level in the right and left main tanks and noted that there was fuel present. He estimated approximately 20 gallons were onboard the airplane. Prior to takeoff, he checked the engine monitoring instrument and noted that he would have about 6 gallons remaining upon landing at Holbrook. After departure, the pilot elected to take a diversion to the south to fly over a landmark. Approximately 15 minutes into the flight, the engine lost power. After troubleshooting, the pilot began preparing for an off-field landing. He flew toward Interstate 40, which was 2-3 miles north of his position. After turning to the freeway, he began troubleshooting again. Once the airplane was within 1/4-mile of the interstate, the airframe began to buffet and the pilot pushed forward on the yoke. He noted the airspeed at 74 knots indicated and pulled aft on the yoke. The airplane was descending much more rapidly than normal and he tried to slow the descent by pulling aft on the yoke. He could not slow the descent of the airplane and it landed short of the freeway in a field and collided with a fence. During the landing, the landing gear broke free and the wings sustained substantial damage. The pilot stated that the airplane's last refueling was on June 20, 2007.

The Coconino County Sheriff's Office personnel responded to the accident site. The officer on-scene checked each of the fuel tanks using a flashlight. There was no visible fuel in any of the fuel tanks and there was no evidence of fuel staining or leakage. The smell of fuel was not evident.

Recovery personnel reported that no fuel was recovered from the fuel tanks during the aircraft removal from the accident site.

Pilot Information

Certificate:	Private	Age:	44, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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 3 With waivers/limitations	Last FAA Medical Exam:	June 1, 2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 1, 2007
Flight Time:	440 hours (Total, all aircraft), 166 hours (Total, this make and model), 374 hours (Pilot In Command, all aircraft), 9 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7584P
Model/Series:	PA 24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-2795
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	July 1, 2006 Annual	Certified Max Gross Wt.:	2900 lbs
Time Since Last Inspection:	100 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4338.2 Hrs as of last inspection	Engine Manufacturer:	Textron Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-540-A1DS
Registered Owner:	Andrew Silver	Rated Power:	300 Horsepower
Operator:	Andrew Silver	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FLG,7014 ft msl	Distance from Accident Site:	27 Nautical Miles
Observation Time:	12:56 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.23 inches Hg	Temperature/Dew Point:	29°C / -11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Flagstaff, AZ (FLG)	Type of Flight Plan Filed:	None
Destination:	Holbrook, AZ (P14)	Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	35.11861,-111.13639

Administrative Information

Investigator In Charge (IIC):	Dunks, Kristi
Additional Participating Persons:	Robert Wagner; Federal Aviation Administration; Scottsdale, AZ
Original Publish Date:	November 29, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=66065

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).