



Aviation Investigation Final Report

Location: N LITTLE ROCK, Arkansas Accident Number: FTW97LA141

Date & Time: March 26, 1997, 17:30 Local Registration: N4802H

Aircraft: Piper PA-17 Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

After takeoff, at about 1500 feet MSL, the engine 'developed roughness and knocking noises.' The engine quit developing power while the airplane was over a residential area. During a forced landing to an 'unfinished' road, the airplane's right wing impacted a small pine tree, which spun the airplane around. The left wing struck another tree before the airplane came to a stop. Both wings were damaged, and the lower rear longeron in the fuselage was bent. Examination of the engine by an FAA inspector revealed that the engine crankshaft had fractured 'between the throws for the #1 and #2 rods.' The camshaft was also 'broken in half by the #1 throw.' Time since the last engine overhaul was 108.7 hours.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: loss of engine power due to failure of the crankshaft. A factor relating to the accident was: the lack of suitable terrain for the forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF

Phase of Operation: CRUISE

Findings

1. (C) ENGINE ASSEMBLY, CRANKSHAFT - FAILURE, TOTAL

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: EMERGENCY LANDING

Findings
2. (F) TERRAIN CONDITION - NONE SUITABLE
3. OBJECT - TREE(S)

Page 2 of 6 FTW97LA141

Factual Information

On March 26, 1997 at 1730 central standard time, a Piper PA-17, N4802H, registered to and operated by LR Air, Inc., was substantially damaged during a forced landing following a loss of engine power during flight near North Little Rock, Arkansas. The private pilot, sole occupant of the airplane, was not injured. Visual meteorological conditions prevailed for the Title 14 CFR Part 91 local flight which originated from the North Little Rock Municipal Airport at 1700. A flight plan was not filed.

The pilot reported that, after takeoff from North Little Rock Airport, at about 1500 feet MSL, the engine "developed roughness and knocking noises." The engine quit developing power while the airplane was over a residential area. During the forced landing to an "unfinished" road, the airplane's right wing impacted a small pine tree, which spun the airplane around. The left wing struck another tree before the airplane came to a stop. Both wings were damaged, and the lower rear longeron in the fuselage was bent.

Examination of the engine by the FAA inspector revealed that the engine crankshaft had fractured "between the throws for the #1 and #2 rods." The camshaft was also "broken in half by the #1 throw." The time since the last engine overhaul was 108.7 hours.

Pilot Information

Certificate:	Private	Age:	65,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 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	November 22, 1995
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	171 hours (Pilot In Command, all aircraft)		

Page 3 of 6 FTW97LA141

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N4802H
Model/Series:	PA-17 PA-17	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17-118
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 1, 1996 Annual	Certified Max Gross Wt.:	1135 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	A65-8
Registered Owner:	L R AIR, INC.	Rated Power:	65 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	24°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	NO. LITTLE ROCK, AR (1M1)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:00 Local	Type of Airspace:	Class G
Departure Time:	17:00 Local	Type of Airspace:	Class G

Page 4 of 6 FTW97LA141

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Forced landing

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:	34.82983,-92.290138(est)

Page 5 of 6 FTW97LA141

Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date:

January 30, 1998

Last Revision Date:

Investigation Class:

Class

Note:

Investigation Docket:

https://data.ntsb.gov/Docket?ProjectID=20183

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

Page 6 of 6 FTW97LA141