

# National Transportation Safety Board Aviation Accident Final Report

Location:	FORT CHAFFEE, AR	Accident Number:	FTW91FA045
Date & Time:	03/01/1991, 1655 CST	Registration:	N7488S
Aircraft:	PIPER PA-60-600	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

## Analysis

THE PILOT OF THE MULTI-ENGINE AIRCRAFT REPORTED THAT HIS RIGHT ENGINE WAS LOSING OIL AS HE WAS CLIMBING TO CRUISE ALTITUDE. HE SECURED THE ENGINE, FEATHERED THE PROPELLER, AND MANEUVERED TO RETURN TO THE AIRPORT. THE PILOT TRIMMED THE AIRCRAFT FOR SINGLE ENGINE OPERATION AND EXTENDED THE MAIN LANDING GEAR. DURING THE APPROACH, THE OPERATING LEFT ENGINE WOULD NOT DEVELOP FULL POWER AND THE PILOT REPORTED TO ATC THAT HE COULD NOT MAKE THE AIRPORT. THE AIRCRAFT CONTINUED ITS EMERGENCY DESCENT, IMPACTED TREES, AND DESCENDED UNCONTROLLED THROUGH A DENSELY WOODED AREA. A FUEL TANK RUPTURED DURING THE UNCONTROLLED DESCENT THROUGH THE TREES AND A FIRE/EXPLOSION OCCURRED. THE AIRCRAFT CONTINUED TO BURN AFTER GROUND IMPACT. BOTH ENGINES WERE DISASSEMBLED AND NUMEROUS MECHANICAL ANOMALIES WERE FOUND. THEY HAD BEEN RECENTLY OVERHAULED. THIS WAS THE FIRST FLIGHT OF THE AIRCRAFT SINCE THE ENGINE OVERHAULS. THE PILOT/OWNER WAS EN ROUTE TO SELL THE AIRCRAFT WHEN THE ACCIDENT OCCURRED.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S OPERATION OF THE AIRCRAFT WITH KNOWN DEFICIENCIES IN EQUIPMENT. FACTORS WERE THE IMPROPER OVERHAUL OF THE ENGINES BY OTHER MAINTENANCE PERSONNEL RESULTING IN OIL LOSS, DETERIORATED ENGINE PERFORMANCE, AND UNSUITABLE TERRAIN.

#### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF Phase of Operation: CLIMB - TO CRUISE Findings 1.1 ENGINE 2. (F) FLUID,OIL - LOSS, PARTIAL 3. (F) MAINTENANCE, OVERHAUL, MAJOR - IMPROPER - OTHER MAINTENANCE PERSONNEL 4. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND -----Occurrence #2: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF Phase of Operation: APPROACH Findings 5. ALL ENGINES 6. (F) MAINTENANCE, OVERHAUL, MAJOR - IMPROPER - OTHER MAINTENANCE PERSONNEL -----Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED -----Occurrence #4: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: DESCENT - EMERGENCY Findings 7. OBJECT - TREE(S) 8. (F) TERRAIN CONDITION - NONE SUITABLE -----Occurrence #5: FIRE/EXPLOSION Phase of Operation: OTHER Findings 9. FUEL SYSTEM, TANK - RUPTURED

## **Factual Information**

#### **Pilot Information**

Certificate:	Private	Age:	47, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Expired	Last FAA Medical Exam:	09/21/1987
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	: 1800 hours (Total, all aircraft), 500 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N7488S
Model/Series:	PA-60-600 PA-60-600	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	60-0045-100
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	5500 lbs
Time Since Last Inspection:	0 Hours	Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	IO-540-G1B5
Registered Owner:	LAWRENCE R. EDWARDS	Rated Power:	290 hp
Operator:	LAWRENCE R. EDWARDS	Operating Certificate(s) Held:	None

#### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	<b>0</b> °
Lowest Cloud Condition:	Scattered / 6000 ft agl	Visibility	25 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	14 knots / 27 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	23°C / 9°C
Precipitation and Obscuration:			
Departure Point:	FORT SMITH, AR (FSM)	Type of Flight Plan Filed:	None
Destination:	VICKSBURG, MS (VKS)	Type of Clearance:	VFR
Departure Time:	1640 CST	Type of Airspace:	

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	1 Fatal	Latitude, Longitude:	

#### Administrative Information

Investigator In Charge (IIC):	O. R WALL	Report Date:	02/08/1993
Additional Participating Persons:	R. D'ANGELO; LITTLE ROCK, AR		
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 <u>pubing@ntsb.gov</u> , or at 800-877-6799. Dockets released after this date are available at <u>http://dms.ntsb.gov/pubdms/</u> .		

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