



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	CONROE, TX	<b>Accident Number:</b>	FTW90DRA10
<b>Date &amp; Time:</b>	09/16/1990, 1326 CDT	<b>Registration:</b>	N7428C
<b>Aircraft:</b>	LOCKHEED PV-2	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	4 None

**Flight Conducted Under:** Part 91: General Aviation - Personal

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## Analysis

DURING TAXI TO TAKEOFF THE CREW SENSED AN ODOR SIMILAR TO AN ELECTRICAL FIRE, AND SMOKE BECAME APPARENT IN THE COCKPIT. BOTH GENERATORS AND THE BATTERY MASTER WERE SECURED. THE RIGHT GENERATOR WOULD NOT ACCEPT A LOAD AND SMOKE WAS COMING FROM THE RIGHT WING ACCESSORY J-BOX IN THE RIGHT WHEEL WELL. THREE OCCUPANTS DEPLANED AND INITIALLY EXTINGUISHED THE FIRE, WHICH REIGNITED DUE TO HOT METAL AND COMPROMISED FUEL/OIL LINES. ALL SYSTEMS WERE SECURED AND THE PILOT THEN EVACUATED THE AIRPLANE, WHICH WAS CONSUMED BY THE FIRE. THE PILOT ESTIMATED THAT FIRE FIGHTING EQUIPMENT DID NOT ARRIVE FOR 20-25 MINUTES AFTER THE FIRE BEGAN. FAA INSPECTORS WERE UNABLE TO DETERMINE THE FIRE SOURCE FROM THE BURNED WRECKAGE. HOWEVER, THE OPERATOR'S REPORT STATED THAT THE RIGHT STARTER SOLENOID DID NOT OPEN AFTER ENGINE START CAUSING THE STARTER TO REMAIN LINKED TO THE ELECTRICAL SYSTEM. THIS RESULTED IN A SYSTEM OVERLOAD AND SUBSEQUENT ELECTRICAL FIRE. BOTH FUEL AND OIL LINES WERE ROUTED THROUGH THE RIGHT WHEEL WELL FOR COCKPIT INDICATIONS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE ENGINE STARTER REMAINED ENGAGED AFTER ENGINE START AND THE ELECTRICAL SYSTEM OVERHEAT.

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: TAXI - TO TAKEOFF

### Findings

1. (C) ENGINE ACCESSORIES,ENGINE STARTER - OTHER  
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Occurrence #2: FIRE

Phase of Operation: TAXI - TO TAKEOFF

### Findings

2. (C) ELECTRICAL SYSTEM - OVERLOAD
3. EMERGENCY PROCEDURE - PERFORMED - PILOT IN COMMAND
4. (F) REMEDIAL ACTION - DELAYED - AIRPORT PERSONNEL

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	42, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last Medical Exam:</b>	06/28/1990
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	18000 hours (Total, all aircraft), 500 hours (Total, this make and model), 16000 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	LOCKHEED	<b>Registration:</b>	N7428C
<b>Model/Series:</b>	PV-2 PV-2	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Limited	<b>Serial Number:</b>	151228
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	09/04/1990, AAIP	<b>Certified Max Gross Wt.:</b>	33000 lbs
<b>Time Since Last Inspection:</b>	5 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	1900 Hours	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	R2800-31
<b>Registered Owner:</b>		<b>Rated Power:</b>	2000 hp
<b>Operator:</b>	CONFEDERATE AIR FORCE	<b>Air Carrier Operating Certificate:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Not Reported
Observation Facility, Elevation:	IAH, 0 ft msl	Observation Time:	1350
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Temperature/Dew Point:	33°C / -18°C
Lowest Ceiling:	Broken / 0 ft agl	Visibility	15 Miles
Wind Speed/Gusts, Direction:	10 knots, 170°	Visibility (RVR):	0 ft
Altimeter Setting:		Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:	LAFAYETTE, LA (LFT)	Type of Clearance:	None
Departure Time:	1326 CDT	Type of Airspace:	

## Airport Information

Airport:	MONTGOMERY COUNTY (CXO)	Runway Surface Type:	Asphalt
Airport Elevation:	247 ft	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	4600 ft / 150 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	4 None	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	PAUL F ALLEN	Adopted Date:	03/12/1993
Additional Participating Persons:			
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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