



National Transportation Safety Board Aviation Accident Final Report

Location:	CONROE, TX	Accident Number:	FTW90DRA10
Date & Time:	09/16/1990, 1326 CDT	Registration:	N7428C
Aircraft:	LOCKHEED PV-2	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

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

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

History of Flight

Pilot Information

Certificate:	Airline Transport	Age:	42, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	06/28/1990
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	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

Aircraft Make:	LOCKHEED	Registration:	N7428C
Model/Series:	PV-2 PV-2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Limited	Serial Number:	151228
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	09/04/1990, AAIP	Certified Max Gross Wt.:	33000 lbs
Time Since Last Inspection:	5 Hours	Engines:	2 Reciprocating
Airframe Total Time:	1900 Hours	Engine Manufacturer:	P&W
ELT:	Installed	Engine Model/Series:	R2800-31
Registered Owner:		Rated Power:	2000 hp
Operator:	CONFEDERATE AIR FORCE	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Not Reported
Observation Facility, Elevation:	IAH, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1350	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	Broken / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	33° C / -18° C
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	Report 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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).