



Aviation Investigation Final Report

Location:	MEXIA, Texas	Accident Number:	FTW87FA197
Date & Time:	August 12, 1987, 17:20 Local	Registration:	N8159S
Aircraft:	PIPER PA-32R	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

THE PLT NOTICED SMOKE IN THE COCKPIT & STARTED TO MAKE A PRECAUTIONARY LNDG AT MEXIA, TX, WHICH WAS NEARBY. HOWEVER, DRG THE DSCNT TO LND, THE SMOKE DISSIPATED, SO HE ELECTED TO CONT TO THE DESTN. DRG THE CLIMB BACK TO ALT, SMOKE REAPPEARED & WAS FOLLOWED BY LOSS OF ENG POWER. THE PLT THEN TRIED TO MAKE A FORCED LNDG AT MEXIA; HOWEVER, THERE WAS INSUFFICIENT ALT TO REACH THE ARPT. WHILE LNDG ABOUT 1 MI FROM THE ARPT, THE ACFT ROLLED THRU A BARBED WIRE FENCE & WAS DAMAGED. AN EXAM OF THE ACFT REVEALED A RETAINING NUT WAS MISSING FROM A CLAMP NEAR 2 MATING SURFACES OF THE EXHAUSTSYS NEAR THE #6 CYLINDER. SUBSEQUENTLY, GASES FROM THE EXHAUST SYS BURNED THRU A VACUUM HOSE & EXTENSIVELY BURNED A NUMBER OF WIRES IN THE IGNITION SYS. THE ACFT HAD BEEN FLOWN 176 HRS SINCE THE LAST ENG & AIRFRAME INSPN.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: FIRE
Phase of Operation: CRUISE

Findings

1. (C) MAINTENANCE - INADEQUATE - COMPANY/OPERATOR MANAGEMENT
2. (F) MAINTENANCE, 100-HOUR INSPECTION - NOT PERFORMED - COMPANY/OPERATOR MANAGEMENT
3. (C) EXHAUST SYSTEM, CLAMP - LOOSE
4. (C) EXHAUST SYSTEM - LEAK
5. VACUUM SYSTEM - BURNED
6. (F) FUSELAGE, CABIN - SMOKE
7. FLIGHT TO ALTERNATE DESTINATION - INITIATED
8. (C) PRECAUTIONARY LANDING - DISCONTINUED - PILOT IN COMMAND
9. CLIMB - INITIATED
10. (C) IGNITION SYSTEM, IGNITION HARNESS - BURNED

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CLIMB

Occurrence #3: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

11. (F) OBJECT - FENCE

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	22, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	December 4, 1986
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1615 hours (Total, all aircraft), 40 hours (Total, this make and model), 1500 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N8159S
Model/Series:	PA-32R PA-32R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	32R8029059
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	November 1, 1986 Annual	Certified Max Gross Wt.:	6500 lbs
Time Since Last Inspection:	176 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2172 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	TIO-540-S1AD
Registered Owner:	TEXAS PARTNERS FLYING INC.	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	HOUSTON CHARTER SERVICE	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FTW ,710 ft msl	Distance from Accident Site:	88 Nautical Miles
Observation Time:	17:51 Local	Direction from Accident Site:	340°
Lowest Cloud Condition:	Scattered / 5000 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	37°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	HOUSTON , TX (HOU)	Type of Flight Plan Filed:	IFR
Destination:	DALLAS , TX (DAL)	Type of Clearance:	IFR
Departure Time:	16:15 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	In-flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	31.669429,-96.479484(est)

Administrative Information

Investigator In Charge (IIC):	Dickens, Bob
Additional Participating Persons:	JOE MONTEROSSA; SAN ANTONIO , TX
Original Publish Date:	January 25, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=22268

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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](#).