



National Transportation Safety Board Aviation Accident Final Report

Location:	EDINBURG, TX	Accident Number:	FTW89FA007
Date & Time:	10/16/1988, 1635 CDT	Registration:	N91BB
Aircraft:	PIPER PA-31-350	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	7 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

ACFT EXPERIENCED A DOUBLE ENG FAILURE. PLT STATED THAT IMMEDIATELY AFTER THE LEFT ENG FAILED, IN CLIMB TO CRUISE, THE ACFT ROLLED LEFT, THE STALL WARNING ACTIVATED, AND THE ACFT ENTERED A LEFT SPIRAL. THE RT ENG FAILED DURING THE TWO-TURN SPIRAL. PLT'S ATTEMPTS TO RESTART THE ENGS WERE UNSUCCESSFUL. PLT SUBSEQUENTLY MADE A SUCCESSFUL GEAR UP EMERG LNDG ON A ROAD, HOWEVER, THE ACFT WAS DESTROYED BY POST-CRASH FIRE. INVESTIGATION REVEALED THAT BOTH ENG FUEL SYSTEMS WERE CONTAMINATED WITH WATER AND DISSOLVED SOLIDS. ACFT HAD JUST BEEN REFUELED AT A FOREIGN AIRPORT.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CLIMB - TO CRUISE

Findings

1. 1 ENGINE
 2. (C) FLUID,FUEL - CONTAMINATION
 3. (C) FLUID,FUEL - WATER
 4. (C) MAINTENANCE,SERVICE OF AIRCRAFT/EQUIPMENT - IMPROPER - FBO PERSONNEL
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CLIMB - TO CRUISE

Findings

5. (C) AIRSPEED(VMC) - NOT MAINTAINED - PILOT IN COMMAND
 6. SPIRAL - UNCONTROLLED
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Occurrence #3: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: DESCENT - UNCONTROLLED

Findings

7. ALL ENGINES
 8. (C) FLUID,FUEL - CONTAMINATION
 9. (C) FLUID,FUEL - WATER
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Occurrence #4: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #5: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

10. WHEELS UP LANDING - PERFORMED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	47, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	09/28/1988
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	2925 hours (Total, all aircraft), 195 hours (Total, this make and model), 2696 hours (Pilot In Command, all aircraft), 42 hours (Last 90 days, all aircraft), 36 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N91BB
Model/Series:	PA-31-350 PA-31-350	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	31-141
Landing Gear Type:	Retractable - Tricycle	Seats:	8
Date/Type of Last Inspection:	09/30/1988, Annual	Certified Max Gross Wt.:	6500 lbs
Time Since Last Inspection:	50 Hours	Engines:	2 Reciprocating
Airframe Total Time:	6373 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-540-A
Registered Owner:	JAMES COSBY & WILLIAM BENSON	Rated Power:	350 hp
Operator:	TEXAS AIR CHARTER	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	ORVA

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:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	135°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	33° C / 18° C
Precipitation and Obscuration:			
Departure Point:	MCALLEN, TX (MFE)	Type of Flight Plan Filed:	IFR
Destination:	HOUSTON, TX (HOU)	Type of Clearance:	IFR
Departure Time:	1616 CDT	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:	6 None	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	7 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	WARREN V WANDEL	Report Date:	01/24/1990
Additional Participating Persons:	JOSEPH FRANZ; SAN ANTONIO, TX		
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 pubin@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](#).