



National Transportation Safety Board Aviation Accident Final Report

Location:	ALTUS, OK	Accident Number:	FTW85FA112
Date & Time:	02/06/1985, 0943 CST	Registration:	N5780M
Aircraft:	CESSNA 402B	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Scheduled		

Analysis

DURING AN ENG START, PRIOR TO THE FLT, THE L ENG BACKFIRED 2 OR 3 TIMES. A WITNESS DESCRIBED THE 1ST BACKFIRED AS 'THE LOUDEST I HAVE EVER HEARD.' WHEN THE ACFT TOOK OFF, TWO PERSONS LIVING NEAR THE DEPARTURE END OF THE RWY NOTED THAT THE ACFT (BELIEVED TO BE THE SAME) SOUNDED DIFFERENT & HAD A 'CLUTTERING SOUND. 'WHILE CLIMBING, THE PLT DECLARED AN EMERGENCY & REPORTED A FIRE IN THE L ENG. HE WAS VECTORED TOWARD ALTUS AFB WHILE DSCNDG IN IFR CONDITIONS. HE DSCNDD INTO VFR CONDITIONS & SAW THE ARPT ABOUT 3 MI AWAY. A WITNESS SAW SMOKE & FIRE TRAILING FROM THE VICINITY OF THE L ENG. HE STATED THAT THE ACFT'S NOSE CAME UP, THE PLANE ROLLED TO THE LEFT, THEN IT ENTERED A STEEP, NOSE DOWN, INVERTED ATTITUDE JUST BEFORE IT CRASHED & BURNED. AN EXAM REVEALED THE ENG EXHAUST MAINIFOLD HEADER ASSY HAD FAILED & ALLOWED HOT EXHAUST GASES TO ESCAPE IN THE ENG NACELLE IN THE VICINITY OF FUEL & OIL LINES. CORROSION HAD PROGRESSED THRU THE HEADER ASSY. AD 75-23-08 REQD GEN INSPN, BUT CONTAINED NOTE 'DO NOT REMOVE CLAMPS.' NO RECORD OF REPLACEMENT IN 6100 HRS

Probable Cause and Findings

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: UNKNOWN

Findings

1. (C) EXHAUST SYSTEM,MANIFOLD/PIPE - CORRODED
 2. (C) MAINTENANCE,INSPECTION - INADEQUATE
 3. (F) PROCEDURE INADEQUATE - MANUFACTURER
 4. (F) INADEQUATE SURVEILLANCE OF OPERATION - FAA(ORGANIZATION)
 5. (C) EXHAUST SYSTEM,MANIFOLD/PIPE - FAILURE,TOTAL
 6. (C) EXHAUST SYSTEM,MANIFOLD/PIPE - LEAK
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Occurrence #2: FIRE
Phase of Operation: CLIMB - TO CRUISE

Findings

7. (C) MISCELLANEOUS - FIRE
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Occurrence #3: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

8. (C) REASON FOR OCCURRENCE UNDETERMINED
 9. (F) WEATHER CONDITION - CLOUDS
 10. INITIATED - PILOT IN COMMAND
 11. PRECAUTIONARY LANDING - ATTEMPTED - PILOT IN COMMAND
 12. AIRCRAFT HANDLING - NOT MAINTAINED
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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	43, Male
Airplane Rating(s):	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):	Airplane Single-engine	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	11/01/1984
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	4227 hours (Total, all aircraft), 643 hours (Total, this make and model), 3762 hours (Pilot In Command, all aircraft), 71 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N5780M
Model/Series:	402B 402B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	402B-0348
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	01/10/1985, AAIP	Certified Max Gross Wt.:	6300 lbs
Time Since Last Inspection:	15 Hours	Engines:	2 Reciprocating
Airframe Total Time:	6100 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520-E
Registered Owner:	ALTUS AIRLINE, INC	Rated Power:	300 hp
Operator:	ALTUS AIRLINE, INC.	Operating Certificate(s) Held:	Commuter Air Carrier (135)
Operator Does Business As:		Operator Designator Code:	ASFA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LTS, 1426 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	0949 CST	Direction from Accident Site:	225°
Lowest Cloud Condition:	Unknown / 1100 ft agl	Visibility	3 Miles
Lowest Ceiling:	Broken / 1100 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	80°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-2° C / -4° C
Precipitation and Obscuration:			
Departure Point:	ALTUS, OK (AXS)	Type of Flight Plan Filed:	IFR
Destination:	OKLAHOMA CITY, OK (OKC)	Type of Clearance:	IFR
Departure Time:	0934 CST	Type of Airspace:	Class E

Airport Information

Airport:	ALTUS AFB (LTS)	Runway Surface Type:	
Airport Elevation:	1426 ft	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	In-Flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	J. O JOHNSON	Report Date:	
Additional Participating Persons:	GARY TAYLOR; BETHANY, OK		
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 pubinquiry@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](#).