



National Transportation Safety Board Aviation Accident Final Report

Location:	BOSSIER CITY, LA	Accident Number:	FTW86FA079
Date & Time:	05/08/1986, 1540 CDT	Registration:	N49DD
Aircraft:	CESSNA 411A	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	6 Fatal
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

THE PILOT REPORTEDLY DID AN UNUSUAL AMOUNT OF ENGINE RUN-UP BEFORE PULLING ONTO THE RUNWAY. HE THEN PERFORMED ANOTHER RUN-UP BEFORE DEPARTING. THIS IS EVIDENCE THAT HE WAS AWARE OF A PROBLEM WITH HIS AIRCRAFT. THE ENGINE(S) WERE POPPING AND PUFFING BLACK SMOKE DURING THE GROUND RUN. YET, THE TAKEOFF WAS CONTINUED. THE POPPING AND SMOKE PUFFING CONTINUED AFTER LIFTOFF. A NOTICEABLE LOSS OF AIRSPEED OCCURRED DURING THE CLIMBOUT. THE AIRCRAFT STARTED THE THIRD ROLL (INTO THE BAD ENGINE) BEFORE FINALLY GOING INVERTED. THE AIRCRAFT'S ALLOWABLE GROSS WEIGHT WAS EXCEEDED BY AT LEAST 205 POUNDS AT TAKEOFF, HOWEVER, THE CENTER OF GRAVITY REMAINED WITHIN IT'S SPECIFIED LIMITS. INTERNAL EXAMINATION OF THE RIGHT ENGINE EXHIBITED EVIDENCE THAT IT HAD OPERATED AT SOMETIME ON A MIXTURE OF GASOLINE AND JET FUEL.

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(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - INTENTIONAL - PILOT IN COMMAND
 2. (C) ENGINE ASSEMBLY,PISTON - BURNED
 3. (C) FLUID,FUEL GRADE - IMPROPER
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

4. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Occurrence #4: FIRE
Phase of Operation: OTHER

Factual Information

Pilot Information

Certificate:	Private	Age:	50, 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:	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	07/24/1985
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	1554 hours (Total, all aircraft), 164 hours (Total, this make and model), 1416 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N49DD
Model/Series:	411A 411A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	411-0266
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	10/26/1985, Annual	Certified Max Gross Wt.:	6500 lbs
Time Since Last Inspection:	9 Hours	Engines:	2 Reciprocating
Airframe Total Time:	4609 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	TGSIO-520-CR
Registered Owner:	C.R. HENINGTON	Rated Power:	340 hp
Operator:	C.R. HENINGTON	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	DTN, 179 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1547 CDT	Direction from Accident Site:	320°
Lowest Cloud Condition:	Scattered / 3000 ft agl	Visibility	7 Miles
Lowest Ceiling:	Broken / 25000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	SHREVEPORT, LA (DTN)	Type of Flight Plan Filed:	IFR
Destination:	BATON ROUGE, LA (BTR)	Type of Clearance:	IFR
Departure Time:	1538 CDT	Type of Airspace:	Class D

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	5 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	J O JOHNSON	Report Date:	
Additional Participating Persons:	JOHN ABEL; BATON ROUGE, LA		
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](#).