

National Transportation Safety Board Aviation Accident Final Report

Location: ATMORE, AL Accident Number: ATL83AA235

Date & Time: 06/21/1983, 2331 CDT Registration: N2960Q

Aircraft: CESSNA 421A Aircraft Damage: Destroyed

Defining Event: Injuries: 8 Fatal

Flight Conducted Under: Part 91: General Aviation - Business

Analysis

ABOUT 20 MINS AFTER TAKEOFF THE PLT REPORTED THE RIGHT ENG HAD LOST POWER & THE ACFT WOULD NOT MAINTAIN ALT. VECTORS WERE PROVIDED FOR AN EMERGENCY LANDING, BUT THE ACFT CRASHED IN A WOODED AREA ABOUT 3 MI FROM THE ARPT. THERE WAS EVIDENCE THAT THE GEAR & FLAPS HAD BEEN EXTENDED & THE ACFT HAD ENTERED A TURN BEFORE IMPACTING. BOTH PROPS HAD EVIDENCEOF LOW TO MODERATE POWER & NEITHER WAS FEATHERED. AN EXAM REVEALED UNSYMMETRICAL WEAR ON THE BLADES OF THE RIGHT TURBOCHARGER; ITS THRUST SPACER, PN 406990-9004, WAS WORN & THERE WAS EVIDENCE OF OIL LEAKAGE. THE 13 QT, RIGHT ENG OIL SYS HAD ONLY 6.85 QTS OF OIL REMAINING. BOTH TURBOCHARGERS HAD BEEN INSTALLED DURING AN ANNUAL INSPECTION IN APRIL 1983 & PREVIOUSLY HAD BEEN OVERHAULED. THE ACFT WAS ESTIMATED TO BE 844 LBS OVER ITS MAX WT LIMIT & THE AFT CG LIMIT WAS EXCEEDED BY ABOUT 4.8 INCHES. SIX OF THE PASSENGERS WERE NOT RESTRAINED BY SEAT BELTS. AN ASSOCIATE ESTIMATED THAT THE PLT HAD ONLY 4 TO 6 HRS OF REST IN THE PREVIOUS 3 TO 4 DAYS.

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: CLIMB - TO CRUISE

Findings

- 1. (F) EXHAUST SYSTEM, TURBOCHARGER WORN
- 2. (F) MAINTENANCE IMPROPER OTHER MAINTENANCE PERSONNEL
- 3. (F) FLUID, OIL LEAK
- 4. (F) EXHAUST SYSTEM, TURBOCHARGER FAILURE, PARTIAL
- 5. PROPELLER FEATHERING NOT PERFORMED PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

- 6. (F) PREFLIGHT PLANNING/PREPARATION IMPROPER PILOT IN COMMAND
- 7. (F) AIRCRAFT WEIGHT AND BALANCE EXCEEDED PILOT IN COMMAND
- 8. PASSENGER BRIEFING INADEQUATE PILOT IN COMMAND
- 9. SEAT BELT NOT USED PASSENGER

Occurrence #3: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: APPROACH

Findings

- 10. (F) LIGHT CONDITION DARK NIGHT
- 11. (C) IN-FLIGHT PLANNING/DECISION IMPROPER PILOT IN COMMAND
- 12. (F) FATIGUE PILOT IN COMMAND
- 13. (C) EMERGENCY PROCEDURE IMPROPER PILOT IN COMMAND
- 14. (F) LACK OF FAMILIARITY WITH AIRCRAFT PILOT IN COMMAND
- 15. (C) GEAR EXTENSION PREMATURE PILOT IN COMMAND
- 16. (F) LOWERING OF FLAPS PREMATURE PILOT IN COMMAND
- 17. (C) AIRSPEED(VMC) NOT MAINTAINED PILOT IN COMMAND

Occurrence #4: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: DESCENT - UNCONTROLLED

Findings

18. (F) OBJECT - TREE(S)

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Factual Information

Pilot Information

Certificate:	Commercial	Age:	39, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	02/18/1982
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4150 hours (Total, all aircraft), 100 hours (Total, this make and model), 4073 hours (Pilot In Command, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:CESSNARegistration:N2960QModel/Series:421A 421AAircraft Category:AirplaneYear of Manufacture:Amateur Built:NoAirworthiness Certificate:NormalSerial Number:421ALanding Gear Type:Retractable - TricycleSeats:6Date/Type of Last Inspection:04/30/1983, AnnualCertified Max Gross Wt.:6840 lbsTime Since Last Inspection:Engines:2 ReciprocatingAirframe Total Time:877 HoursEngine Manufacturer:CONTINENTALELT:Installed, not activatedEngine Model/Series:GTSIO-520-DRegistered Owner:MID SOUTH AIRCRAFT SALESRated Power:375 hpOperator:E. MASON ADOMOperating Certificate(s) Held:Operator Does Business As:ODOM FLYING SERVICEOperator Designator Code:				
Year of Manufacture: Airworthiness Certificate: Normal Serial Number: 421A Landing Gear Type: Retractable - Tricycle Date/Type of Last Inspection: 04/30/1983, Annual Certified Max Gross Wt.: 6840 lbs Time Since Last Inspection: Engines: 2 Reciprocating Airframe Total Time: 877 Hours Engine Manufacturer: CONTINENTAL ELT: Installed, not activated Engine Model/Series: GTSIO-520-D Registered Owner: MID SOUTH AIRCRAFT SALES Rated Power: Operator: Contine Sand GTSIO-520-D Operator: Operator: Amateur Built: No Amateur Built: No April 1941 Agents Certified Max Gross Wt.: 6840 lbs Contine Manufacturer: CONTINENTAL Contine Model/Series: GTSIO-520-D Operator: Operator: Operating Certificate(s) Held:	Aircraft Make:	CESSNA	Registration:	N2960Q
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Held:	Registered Owner:	MID SOUTH AIRCRAFT SALES	Rated Power:	375 hp
Operator Does Business As: ODOM FLYING SERVICE Operator Designator Code:	Operator:	E. MASON ADOM		
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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	PNS, 121 ft msl	Distance from Accident Site:	38 Nautical Miles
Observation Time:	1747 CDT	Direction from Accident Site:	155°
Lowest Cloud Condition:	Scattered / 1000 ft agl	Visibility	7 Miles
Lowest Ceiling:	Broken / 2000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	23°C / 22°C
Precipitation and Obscuration:			
Departure Point:	PENSACOLA, FL (PNS)	Type of Flight Plan Filed:	IFR
Destination:	ST.LOUIS, MO (STL)	Type of Clearance:	IFR
Departure Time:	0000	Type of Airspace:	Class G

Airport Information

Airport:	ATMORE MUNI (OR1)	Runway Surface Type:	
Airport Elevation:	284 ft	Runway Surface Condition:	
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	4925 ft / 80 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	7 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	8 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JOHN	B DRAKE	Report Date:
Additional Participating Persons:	CYNTHIA L BOWMAN; ATLANTA, GA JOHN WOODS; BIRMINGHAM, AL JAMES NASH; BIRMINGHAM, AL JOHN V MOELLER; MOBILE, AL		
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 publinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/ .		

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The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.

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