

National Transportation Safety Board Aviation Accident Final Report

Location: JASPER, AL Accident Number: DCA85AA006

Date & Time: 12/16/1984, 1230 CST Registration: N44828

Aircraft: CONVAIR 440 Aircraft Damage: Destroyed

Defining Event: Injuries: 2 Serious, 37 None

Flight Conducted Under: Part 121: Air Carrier - Non-scheduled

Analysis

SHORTLY AFTER CLIMBING & LEVELING AT 6000 FT, THE R ENG BMEP GAGE INDICATED A RAPID POWER LOSS & THE R ENG RPM 'INCREASED OUT OF CONTROL' TO ABOUT 3100 RPM. THE AIRCREW RETARDED THE R THROTTLE & REDUCED THE R ENG TO 2100 PRM BY USING THE PROP INCREASE/DECREASE TOGGLE SW. THE AIRCREW WERE UNABLE TO FEATHER THE R PROP OR MAINTAIN ALT, SO THEY DIVERTED TO THE NEAREST ARPT (WALKER COUNTY). WHILE TURNING DOWNWIND FOR RWY 9, THE R ENG FIRE INDICATOR ACTIVATED & THE COPLT CONFIRMED A FIRE. BOTH FIRE BOTTLES WERE DISCHARGED & THE R PROP STOPPED ROTATING. INJECTION WATER FOR THE L ENG WAS EXHAUSTED & THE L ENG BEGAN BACKFIRING. THE CAPTAIN THEN MANEUVERED & LANDED ON RWY 27. AFTER TOUCHDOWN, THE R MAIN TIRES FAILED, THE ACFT VEERED OFF THE R SIDE OF THE RWY & HIT A DITCH & THE GEAR COLLAPSED. AN EXAM REVEALED THE #6 CYL LINK ROD &/OR PISTON IN THE R ENG HAD FAILED, RESULTING IN FURTHER DAMAGE TO THE ENG & #6 CYL. SUBSEQUENTLY, FIRE & HEAT CAUSED THE R ENG TO SEIZE & ALSO DAMGED THE R MAIN TIRES WHICH FAILED AT TOUCHDOWN.

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

Phase of Operation: CRUISE

Findings

1. (F) ENGINE ASSEMBLY, CONNECTING ROD - FAILURE, TOTAL

- 2. (F) ENGINE ASSEMBLY, PISTON FAILURE, TOTAL
- 3. (C) ENGINE ASSEMBLY FAILURE, TOTAL
- 4. (F) PROPELLER FEATHERING NOT POSSIBLE

Occurrence #2: FIRE

Phase of Operation: CRUISE

Findings

5. (C) ENGINE ASSEMBLY - FIRE

6. FIRE EXTINGUISHING EQUIPMENT - SELECTED

7. (F) LANDING GEAR, TIRE - OVERTEMPERATURE

Occurrence #3: FORCED LANDING Phase of Operation: LANDING

Findings

8. FLUID, ADI FLUID - EXHAUSTION

Occurrence #4: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

9. (C) LANDING GEAR, TIRE - FAILURE, TOTAL 10. (F) DIRECTIONAL CONTROL - NOT POSSIBLE

11. (F) GROUND LOOP/SWERVE - UNCONTROLLED

Occurrence #5: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

12. (F) TERRAIN CONDITION - DITCH

13. LANDING GEAR - OVERLOAD

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Factual Information

Pilot Information

Certificate:	Airline Transport; Flight Instructor	Age:	31, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	02/27/1984
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3500 hours (Total, all aircraft), 105 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CONVAIR	Registration:	N44828
Model/Series:	440 440	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	468
Landing Gear Type:	Retractable - Tricycle	Seats:	48
Date/Type of Last Inspection:	10/20/1984, AAIP	Certified Max Gross Wt.:	48000 lbs
Time Since Last Inspection:	407 Hours	Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Installed	Engine Model/Series:	R-2800-CB16
Registered Owner:	FLIGHT TRAILS	Rated Power:	2500 hp
Operator:	FLIGHT TRAILS	Operating Certificate(s) Held:	Supplemental
Operator Does Business As:	AIR RESORTS AIRLINE	Operator Designator Code:	ARZ

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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:	Thin Overcast / 4500 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	BIRMINGHAM, AL (BMH)	Type of Flight Plan Filed:	IFR
Destination:	OXFORD, MS (UOX)	Type of Clearance:	IFR
Departure Time:	1700 CST	Type of Airspace:	Class E

Airport Information

Airport:	WALKER COUNTY (L02)	Runway Surface Type:	Macadam
Airport Elevation:	480 ft	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	4800 ft / 100 ft	VFR Approach/Landing:	Forced Landing; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 Serious, 4 None	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Serious, 33 None	Aircraft Fire:	In-Flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious, 37 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	GEORGE SEIDLEIN	Report Date:
Additional Participating Persons:	F. DELDANDIO; WASHINGTON, DC J. MORGAN; CARLSBAD, CA	
Publish Date:		
Investigation Docket:	investigations. Dockets released prior to Ju	ns permanent archival information for the NTSB's ne 1, 2009 are publicly available from the NTSB's sb.gov, or at 800-877-6799. Dockets released after 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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