



National Transportation Safety Board Aviation Incident Data Summary

Location:	Atlanta, GA	Incident Number:	ATL04IA085
Date & Time:	03/05/2004, 1539 EST	Registration:	N978AT
Aircraft:	Boeing 717-200	Injuries:	118 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

According to the captain, during the climb out from runway 26L at approximately 200 feet, the number 6 display unit on the pilot's instrument panel went blank and the engine alert display left generator off alert displayed. The first officer requested radar vectors from the Atlanta Tower. After contacting the tower the airplane had a complete electrical power failure, and communications with the Atlanta Tower was lost. Emergency electrical power was restored shortly after the electrical failure. The flight attendants advised the captain that there was smoke in the aft part of the cabin area. The captain and first officer "smelled an electrical burning smell", and declared an emergency. The captain returned to the airport and made an emergency landing, and evacuated the airplane on runway 9R. Examination of the Power Conversion Distribution Unit revealed that the tantalum capacitor and the permanent magnet generator input transformer failed. The failed transformer was the apparent source of the smoke in the cabin. No other anomalies were reported by the captain.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be: The failure of the tantalum capacitor and the permanent magnet generator input transformer which resulted in total electrical system failure.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings

1. (C) ELECTRICAL SYSTEM - FAILURE, TOTAL

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	32
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	7300 hours (Total, all aircraft)		

Co-Pilot Information

Certificate:	Airline Transport; Commercial	Age:	37
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	8000 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Boeing	Registration:	N978AT
Model/Series:	717-200	Engines:	2 Turbo Fan
Operator:	AIRTRAN AIRWAYS INC	Engine Manufacturer:	Rolls-Royce
Air Carrier Operating Certificate:	Flag carrier (121)	Engine Model/Series:	BR 715
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KATL, 1034 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	Broken / 9000 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	10 knots, 190°
Temperature:	24° C / 17° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	ATLANTA, GA (ATL)	Destination:	MINNEAPOLIS, MI (MSP)

Airport Information

Airport:	THE WILLIAM B HARTSFIELD ATLAN (ATL)	Runway Surface Type:	Asphalt
Runway Used:	9R	Runway Surface Condition:	Dry
Runway Length/Width:	9001 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	5 None	Aircraft Damage:	None
Passenger Injuries:	113 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Eric H Alleyne	Adopted Date:	03/30/2005
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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