



# Aviation Investigation Final Report

<b>Location:</b>	DETROIT, Michigan	<b>Incident Number:</b>	FTW88IA097
<b>Date &amp; Time:</b>	May 9, 1988, 16:40 Local	<b>Registration:</b>	N800AA
<b>Aircraft:</b>	BOEING 727-223	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>		<b>Injuries:</b>	112 None
<b>Flight Conducted Under:</b>	Part 121: Air carrier - Scheduled		

## Analysis

THE PIC MADE AN UNSCHEDULED LANDING FOLLOWING DECOMPRESSION AT 30,000 FEET. THE AIRCRAFT HAD BEEN WRITTEN UP BY FLIGHTCREWS NUMEROUS TIMES BETWEEN MAY 7 AND MAY 9 FOR PRESSURIZATION PROBLEMS. PRESSURE BULKHEAD AT STATION 940 IN THE RIGHT WHEEL WELL CRACKED 15 1/2 INCHES DUE TO FATIGUE. AIRCRAFT HAD FLOWN 55,437 HOURS AND HAD 39,983 CYCLES AT THE TIME OF DECOMPRESSION, ONE OF THE HIGHEST HRS AND CYCLES IN THE AMERICAN FLEET. BOEING AIRCRAFT ISSUED A SERVICE BULLETIN DATED MAY 4, 1979 WHICH WAS NOT COMPLIED WITH THAT ADDRESSED THE ISSUE OF BEAD CRACKING IN THE 940 STATION WHEEL WELL PANEL.

## Probable Cause and Findings

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

### Findings

Occurrence #1: DECOMPRESSION  
Phase of Operation: CLIMB - TO CRUISE

#### Findings

1. (C) FUSELAGE,FLOOR - FATIGUE
2. (C) FUSELAGE,FLOOR - CRACKED

3. EMERGENCY PROCEDURE - INITIATED - PILOT IN COMMAND
4. (C) MAINTENANCE, INSPECTION - INADEQUATE - COMPANY MAINTENANCE PERSONNEL

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	46, Male
<b>Airplane Rating(s):</b>	Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	December 9, 1987
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	8640 hours (Total, all aircraft), 730 hours (Total, this make and model), 145 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BOEING	<b>Registration:</b>	N800AA
<b>Model/Series:</b>	727-223 727-223	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	19475
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	140
<b>Date/Type of Last Inspection:</b>	Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	169000 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	3 Turbo jet
<b>Airframe Total Time:</b>	55437 Hrs	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	JT8D-9A
<b>Registered Owner:</b>	AMERICAN AIRLINES	<b>Rated Power:</b>	14500 Lbs thrust
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	AALA

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	Unknown	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	CHICAGO , IL (ORD )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	PHILADELPHIA , PA (PHL )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	00:00 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	7 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	105 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	112 None	<b>Latitude, Longitude:</b>	42.219112,-83.349609(est)

## Administrative Information

**Investigator In Charge (IIC):** Edwards, Armond

**Additional Participating Persons:** MITCHELL;

**Original Publish Date:** June 11, 1990

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=22573>

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