



# National Transportation Safety Board Aviation Incident Data Summary

<b>Location:</b>	DENVER, CO	<b>Incident Number:</b>	DEN92IA025
<b>Date &amp; Time:</b>	01/03/1992, 1355 MST	<b>Registration:</b>	N343UA
<b>Aircraft:</b>	BOEING 737-300	<b>Injuries:</b>	127 None
<b>Flight Conducted Under:</b>	Part 121: Air Carrier - Scheduled		

## Analysis

DURING CLIMB, THE CREW NOTED AN ELECTRICAL ARCING SOUND AND SLIGHT ELECTRICAL-TYPE BURNING ODOR WHILE PASSING THROUGH FLIGHT LEVEL 180. EMERGENCY PROCEDURES WERE COMPLIED WITH AND THE PROBLEM APPEARED TO BE SOLVED. THE CLIMB WAS CONTINUED, AND WHILE PASSING THROUGH FLIGHT LEVEL 330 A LOUD ARCING SOUND WAS AGAIN HEARD ACCOMPANIED BY FLAMES FROM THE FLIGHT DECK AFT OVERHEAD PANEL. THE FLIGHT ATTENDANTS EXTINGUISHED THE FIRE, AND THE FLIGHT RETURNED TO DENVER AND LANDED WITHOUT FURTHER INCIDENT. EXAMINATION DISCLOSED A SHORT IN A WIRE BUNDLE. THE BUNDLE WAS NOT SHIELDED OR ANCHORED AS THE OTHER MAJOR BUNDLE IN THE COMPARTMENT. THE SHORT WAS DUE TO THE BUNDLE CHAFING ON THE FLIGHT DECK ENTRY DOOR FRAME. IN ADDITION, TESTING REVEALED THAT THE WIRE GAUGE USED IN PART OF THIS APPLICATION WAS INSUFFICIENT FOR THE ELECTRICAL LOAD.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be: AN ELECTRICAL SHORT CIRCUIT IN A MAIN WIRE BUNDLE DUE TO CHAFING OF THE BUNDLE ON AIRFRAME STRUCTURAL MEMBERS.

## Findings

Occurrence #1: FIRE

Phase of Operation: CLIMB - TO CRUISE

### Findings

1. (C) ELECTRICAL SYSTEM,ELECTRIC WIRING - CHAFED
2. (C) ELECTRICAL SYSTEM,ELECTRIC WIRING - SHORTED
3. (C) ELECTRICAL SYSTEM,ELECTRIC WIRING - FIRE

## Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	48
<b>Airplane Rating(s):</b>	Multi-engine Land; Multi-engine Sea; Single-engine Land; Single-engine Sea	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	6673 hours (Total, all aircraft), 1399 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BOEING	<b>Registration:</b>	N343UA
<b>Model/Series:</b>	737-300 737-300	<b>Engines:</b>	2 Turbo Fan
<b>Operator:</b>	UNITED AIRLINES	<b>Engine Manufacturer:</b>	GE
<b>Operating Certificate(s) Held:</b>	Flag carrier (121)	<b>Engine Model/Series:</b>	CFM 56
<b>Flight Conducted Under:</b>	Part 121: Air Carrier - Scheduled		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	, 0 ft msl	<b>Weather Information Source:</b>	Pilot
<b>Lowest Ceiling:</b>	None / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	7 knots / , 190°
<b>Temperature:</b>	9°C	<b>Visibility</b>	99 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	<b>Destination:</b> LAS VEGAS, NV (LAS)		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	6 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	121 None	<b>Aircraft Fire:</b>	In-Flight
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

<b>Investigator In Charge (IIC):</b>	NORMAN F WIEMEYER	<b>Adopted Date:</b>	12/16/1993
<b>Investigation Docket:</b>	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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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.