



National Transportation Safety Board Aviation Incident Final Report

Location:	CHICAGO, IL	Incident Number:	CHI871A201
Date & Time:	09/02/1987, 1905 CDT	Registration:	N8078U
Aircraft:	MCDONNELL DOUGLAS DC-8-71	Aircraft Damage:	None
Defining Event:		Injuries:	1 Minor, 126 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

SMOKE DETECTED IN THE CABIN RESULTED IN AN EVACUATION OF THE AIRCRAFT JUST AFTER BEING PUSHED BACK FROM THE JET-WAY. SUBSEQUENT INVESTIGATION ESTABLISHED THAT A MALFUNCTIONING PACK VALVE HAD CAUSED THE AIR-CONDITIONING SYSTEM TO OVERHEAT CAUSING THE SMOKE. THE EMERGENCY SLIDE AT DOOR 2R INFLATED PARTIALLY INSIDE THE ACFT AND WAS NOT USABLE. AT THE TIME OF INITIAL INVESTIGATION THE SLIDE TRAY DOOR FROM 2R WAS FOUND LYING ON THE FLOOR INSIDE THE ACFT. EXITS 1L, 2L, 4L, 4R AND FOUR OVER WING EXITS WERE USED (THE CAPT HAD LOWERED THE FLAPS TO FULL DOWN FOR THE EVACUATION). IT WAS DETERMINED DURING INVESTIGATION THAT THE DOOR WAS NOT OPENED FULLY ENOUGH FOR EXIT 2R TO OPERATE PROPERLY. UAL MODIFIED THE TRAINING TO EMPHASIZE THE DOOR OPENING PROCEDURE. THE FA SAID SHE PULLED THE (MANUAL INFLATION) HANDLE ON 2R.

Probable Cause and Findings

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: STANDING - STARTING ENGINE(S)

Findings

1. (C) AIR COND/HEATING/PRESSURIZATION,SAFETY VALVE - FAILURE,TOTAL
2. (C) AIR COND/HEATING/PRESSURIZATION - OVERTEMPERATURE
3. (C) FUSELAGE,CABIN - SMOKE
4. (F) EMERGENCY PROCEDURE - INITIATED - PILOT IN COMMAND
5. (F) EVACUATION - PERFORMED - PILOT IN COMMAND

Occurrence #2: MISCELLANEOUS/OTHER
Phase of Operation: STANDING

Findings

6. (F) MISC EQPT/FURNISHINGS,SLIDES - MOVEMENT RESTRICTED
7. (F) EMERGENCY PROCEDURE - IMPROPER - FLIGHT ATTENDANT

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	54, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Unknown Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	14591 hours (Total, all aircraft), 5102 hours (Total, this make and model), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	MCDONNELL DOUGLAS	Registration:	N8078U
Model/Series:	DC-8-71 DC-8-71	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	45946
Landing Gear Type:	Retractable - Tricycle	Seats:	152
Date/Type of Last Inspection:	Continuous Airworthiness	Certified Max Gross Wt.:	336000 lbs
Time Since Last Inspection:	610 Hours	Engines:	4 Turbo Fan
Airframe Total Time:	56166 Hours	Engine Manufacturer:	CFM
ELT:	Not installed	Engine Model/Series:	56-2C1
Registered Owner:	UNITED AIRLINES	Rated Power:	20560 lbs
Operator:	UNITED AIRLINES	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	UALA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	ORD, 667 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1822 CDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16 °C / 10 °C
Precipitation and Obscuration:			
Departure Point:	(ORD)	Type of Flight Plan Filed:	IFR
Destination:	SACRAMENTO, CA (SMF)	Type of Clearance:	IFR
Departure Time:	0000	Type of Airspace:	Class B; Class D; Class E

Airport Information

Airport:	O'HARE INTERNATIONAL (ORD)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	8 None	Aircraft Damage:	None
Passenger Injuries:	1 Minor, 118 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 126 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	STEVE WILSON	Report Date:	07/10/1989
Additional Participating Persons:	J. B JONES; SCHILLER PARK, IL B. MARSEY; CHICAGO, IL		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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](#).