Rapid decompression, McDonnell Douglas MD-83, December 26, 2005

Micro-summary: This McDonnell Douglas MD-83 experienced a rapid cabin decompression on climb.

Event Date: 2005-12-26 at 1635 PST

Investigative Body: National Transportation Safety Board (NTSB), USA

Investigative Body's Web Site: http://www.ntsb.gov/

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National Transportation Safety Board NTSB ID: SEA06LA033 Aircraft Registration Number: N979AS FACTUAL REPORT Occurrence Date: 12/26/2005 Most Critical Injury: None ÁVIATION Occurrence Type: Accident Investigated By: NTSB Location/Time Nearest City/Place State Zip Code Local Time Time Zone PST WA 98188 1635 Seattle Distance From Landing Facility: Direction From Airport: Airport Proximity: On Airport Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft McDonnell Douglas MD-83 Airplane

Air Medical Transport Flight: No

Narrative

Sightseeing Flight: No

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

On December 26, 2005, at approximately 1635 Pacific standard time, a McDonnell Douglas MD-83, N979AS, was substantially damaged when the airplane experienced a rapid cabin depressurization during climb out from Seattle, Washington. The airline transport pilot captain and first officer, the three flight crew members, and the 137 passengers were not injured. Alaska Airlines Inc. was operating the airplane under Title 14 CFR Part 121, as flight number 536. Visual meteorological conditions prevailed for the commercial cross-country flight that originated approximately 30 minutes before the accident. The flight was on an IFR clearance with a destination of Burbank, California.

The captain said that the airplane arrived late into Seattle, from its previous flight, and the new flight crew was waiting at the gate. After the airplane was chalked and the engines were shut down, the first officer immediately performed his preflight inspection.

A new (approximately one week on the job) ground baggage handler, who was driving a tug towing a train of baggage carts, said that he waited for a belt loader to be correctly positioned on the right side at the middle cargo door of the airplane. He said that he approached the airplane from aft to forward, but had to maneuver around another train of carts to get close to the belt loader. Once in position, he said the front of his tug was 4 to 5 feet away from the airplane. After loading the carts with baggage, he attempted to drive away. He said that he turned the tug's wheels as far as possible. He stated, "I was hoping to make it out, but I felt my tug going against something. I immediately set my foot on the brakes and glanced at the body [in moderate rain] of the aircraft to see if there was any damage. It was a quick glance and I did not see any damage." He said two other ground personnel came to assist him in maneuvering his tug away from the airplane. He did not report the incident to anyone.

The pilot said that the takeoff was normal. During the climb out, at approximately 26,000 feet, they heard a loud bang, and the cabin depressurized. He said that they put their oxygen masks on, and coordinated a descent to a lower altitude with Seattle Center. An uneventful landing was performed at Seattle-Tacoma International Airport, Seattle, Washington. Post landing examination of the fuselage revealed a 12 by 6 inch hole between the middle and forward cargo doors on the right side of the airplane. After the occurrence, the ground baggage handler confessed that he had "grazed the airplane" with a tug, while attempting to depart the vicinity of the airplane.

National Transportation Safety Board
FACTUAL REPORT

NTSB ID: SEA06LA033

Occurrence Date: 12/26/2005

AVIATION			Occu	Occurrence Type: Accident										
Landing Facility/Approach In	formation													
					ort ID:	Airport Eleva	tion	Run	way Used Runway Lengt		:h	Runv	vay Width	
				SEA		433 Ft.			-					
Runway Surface Type:														
Runway Surface Condition:														
Type Instrument Approach: Unknown	own													
VFR Approach/Landing: Unknown	า													
Aircraft Information														
Aircraft Manufacturer McDonnell Douglas					Model/3						Serial 5347	rial Number 3471		
Airworthiness Certificate(s): Transport														
Landing Gear Type: Retractable - Tricycle														
Homebuilt Aircraft? No	Number of	mber of Seats: 145 Certified Max Gross Wt.						161000 LBS Number			er of Engines: 2		: 2	
• • • • • • • • • • • • • • • • • • • •				Engine Manufacturer: Model/Series: Pratt & Whitney JT8D-217A							Rated Power: 20000 LBS			
- Aircraft Inspection Information														
Type of Last Inspection				Date	Date of Last Inspection Time Si				ince Last Inspection				ne To	tal Time
Continuous Airworthiness				12/2	12/2005					Ho	Hours 33530 Hours			
- Emergency Locator Transmitter (ELT) Inforn	nation												
ELT Installed? No	alled? No ELT Operated? No						ELT	√ Aided ir	n Locating Ac	cident S	Site? No)		
Owner/Operator Information														
Registered Aircraft Owner				S	Street A	Address 19300 Pa	acific	HWY S	.					
Alaska Airlines Inc.				City							Stat	:e	Zip Code 98188	
Operator of Aircraft Street Address Same as Reg'd Aircraft Owner														
Same as Reg'd Aircraft Owner			City						Stat	ie	Zip Code			
Operator Does Business As:	Operator Does Business As: Operator Designator Code: ASAA													
- Type of U.S. Certificate(s) Held:														
Air Carrier Operating Certificate(s)	: Flag Carr	rier/Dome	estic											
Operating Certificate:						Operator C	Certific	cate:						
Regulation Flight Conducted Unde	r: Part 121	1: Air Car	rrier											
Type of Flight Operation Conducted	d: Schedu	led; Dom	nestic;	; Pass	senger	Only								
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National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: SEA06LA033

Occurrence Date: 12/26/2005

AVIATION Occurrence Type: Accident													
First Pilot Information													
Name	City	Sta Sta						Date of Birth	Age				
On File	On File	File Or					ile	On File	53				
Sex: M Seat Occupied: Left Principal Profession: Occupational Pilot Certificate Number: On File													
Certificate(s): Airline Transport; Commercial; Flight Engineer													
Airplane Rating(s): Multi-engine Land; Single-engine Land													
Rotorcraft/Glider/LTA: Free Balloon; Glider													
Instrument Rating(s): Airpla	ane												
Instructor Rating(s):													
Type Rating/Endorsement fo	Type Rating/Endorsement for Accident/Incident Aircraft? Current Biennial Flight Review? 07/2005												
Medical Cert.: Class 1	Medica	al Cert. Status	: With Wai	vers/Limitat	ions			Date	of Las	st Med	dical Ex	am: 10/2005	
	-												
- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night	Night Actual		Instrument Simulated		Ro	otorcraft	Glider	Lighter Than Air
Total Time	al Time 13978												
Pilot In Command(PIC)	ommand(PIC)												
Instructor						\dashv		_		+			
Last 90 Days	162					-							
Last 30 Days Last 24 Hours	1	1		1		\dashv		-		+			
Seatbelt Used? Yes													
Seatbelt Used? Yes Shoulder Harness Used? Yes Toxicology Performed? No Second Pilot? Yes													
Flight Plan/Itinerary													
Type of Flight Plan Filed: IFR													
Departure Point State Airport Identifier Departure Time Time Zono								Time Zone					
Same as Accident/Incident Location SEA 1605 PST								PST					
Destination State Airport Identifier													
Burbank CA BUR													
Type of Clearance: IFR													
Type of Airspace:													
Weather Information													
Source of Briefing: Company; Commercial Weather Service; TV/Radio Weather													
Method of Briefing:													
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National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: SEA06LA033

Occurrence Date: 12/26/2005

Occurrence Type: Accident

	FTYBOR		Occurrent	,е туре.	Accident										
Weather	Information														
WOF ID	Observation Time	Time Zone	WOF Elevati	ion	WOF Distance From Accident Site					Direction Fro	m Accident S	lite			
SEA	1656	PST	433 Ft.	. MSL	NM					Deg. Mag.					
Sky/Lowes	st Cloud Condition: Few			3000 Ft. AGL						Condition of Light: Day					
Lowest Ce	iling: Broken		7000 Ft.	AGL	Visibil	lity:	10	SM	Altir	meter:	29.88	"Hg			
Temperatu	Temperature: 10 °C Dew Point:			Wind Direction: 190 Density Altitude:							Ft.				
Wind Spee	ed: 9	Gusts:		Weather Condtions at Accident Site: Visual Conditions											
Visibility (R	RVR): Ft.	Visibility (R	VV)	SM	Intensity	of Precipita	ition:								
Restriction	Restrictions to Visibility: Moderate - Rain														
Type of Pre	Type of Precipitation:														
Accident Information															
Aircraft Damage: Substantial Aircraft Fi					!			Aircraft Exp	losio	n None					
Classification	on:														
- Injury Sur	mmary Matrix	Fatal Se	erious Mino	or	None	TOTAL									
First Pil	lot				1	1									
Second	d Pilot				1	1									
Student	t Pilot														
Flight Ir	nstructor														
Check F	Pilot														
Flight E	Engineer														
Cabin A	Attendants				3	3									
Other C	Crew														
Passen	ngers				137	137									
- TOTAL A	ABOARD -				142	142									
Other G	Ground Ground														
- GRAND	O TOTAL -				142	142									

National Transportation Safety Board

FACTUAL REPORT AVIATION

NTSB ID: SEA06LA033

Occurrence Date: 12/26/2005

Occurrence Type: Accident

	ormation

Investigator-In-Charge (IIC)

James F. Struhsaker

Additional Persons Participating in This Accident/Incident Investigation:

Tom Normoyle FAA FSDO Seattle, WA