# Emergency evacuation due to fumes, McDonnell Douglas MD-80 December 19, 1997

Micro-summary: The introduction of fumes from hydraulic vapors motivated an evacuation for the occupants of this McDonnell Douglas MD-80.

Event Date: 1997-12-19 at 1815 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: LAX98IA061 Aircraft Registration Number: N932AS FACTUAL REPORT Occurrence Date: 12/19/1997 Most Critical Injury: None Occurrence Type: Incident Investigated By: NTSB Location/Time Nearest City/Place State Zip Code Local Time Time Zone SAN FRANCISCO **PST** CA 94010 1815 Distance From Landing Facility: Direction From Airport: Airport Proximity: On Airport Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft McDonnell Douglas MD-80 Airplane Sightseeing Flight: No Air Medical Transport Flight: No

## Narrative

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

On December 19, 1997, at 1815 hours Pacific standard time, the crew of an Alaska Airlines MD-80, N932AS, operating as Flight 536 from Palm Springs, California, to San Francisco, California, under 14 CFR Part 121, ordered an emergency evacuation after experiencing noxious fumes entering the aircraft. Visual meteorological conditions existed at the time. There was no damage to the aircraft and no injuries to the 5 crewmembers or to the 69 passengers.

According to the operator, the aircraft was taxiing to the gate after landing when fumes and mist began to enter the cabin through the air conditioning ducts. Although first noted as thin, the vapors quickly filled the cabin, reducing visibility, and causing respiratory distress along with burning eyes to crew and passengers. The crew elected to stop the aircraft on the taxiway near the intersection of "A" and "H" taxiways. The captain ordered an immediate evacuation over the aircraft's public address system. The crew estimated the evacuation was accomplished within 90 seconds.

After the evacuation, the flight attendants commented on having to divest passengers of carry-on baggage during the evacuation. A concern was that the baggage taken from the passengers could block the path to the exit(s). All flight attendants commented on how useful they found their flashlights to be. All retrieved their flashlights before proceeding to the exits and found them to be invaluable during the evacuation, as well as on the ground.

Subsequent investigation revealed the source of the vapors as a failed hydraulic return line from the left-hand engine thrust reverser. Leaking fluid from the line was ingested into the aircraft's APU that had been started by the flight crew after landing in accordance with normal procedures.

National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: LAX98IA061

Occurrence Date: 12/19/1997

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AVIATION	Оссі	urrence	е Туре:	Incident										
Landing Facility/Approach Information														
Airport Name	Airpo	rt ID:	Airport Elev	ation	Run	way Used	Runwa	way Length		Runv	vay Width			
SAN FRANCISCO	SAN FRANCISCO S					. 0								
Runway Surface Type:														
Runway Surface Condition:														
Type Instrument Approach:														
VFR Approach/Landing:														
Aircraft Information														
Aircraft Manufacturer McDonnell Douglas			Model/ MD-8						Serial	Numbe	r			
Airworthiness Certificate(s): Transport														
Landing Gear Type: Tricycle														
Homebuilt Aircraft? No Number of Seat	Number of Seats:				Certified Max Gross Wt.				LBS Numbe			: 2		
Engine Type: Unknown	=					Engine Manufacturer: Model/Series:						Rated Power:		
- Aircraft Inspection Information														
Type of Last Inspection		Date	Date of Last Inspection Time Si			ince Last Inspection			Airfran	ne To	tal Time			
Continuous Airworthiness			Н						lours Hours					
- Emergency Locator Transmitter (ELT) Information														
ELT Installed? No ELT Ope	ated?				EL.	Γ Aided i	n Locating Ad	cident S	Site?					
Owner/Operator Information														
Registered Aircraft Owner		5	Street Address PO BOX 68900											
ALASKA AIRLINES			City								е	Zip Code		
		+	SEATTLE Street Address									98168		
Operator of Aircraft		3	street A		s Reg	d Aircr	aft Owner							
Same as Reg'd Aircraft Owner		C	City							State	е	Zip Code		
Operator Does Business As:						O	perator Desig	nator Co	ode:					
- Type of U.S. Certificate(s) Held:														
Air Carrier Operating Certificate(s): Flag Carrier/D	omestic													
Operating Certificate:				Operator	Certifi	cate:								
Regulation Flight Conducted Under: Part 121: Air Carrier														
Type of Flight Operation Conducted: Scheduled; [	omestic	; Pas	senger	Only										
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National Transportation Safety Board

FACTUAL REPORT

AVIATION

NTSB ID: LAX98IA061

Occurrence Date: 12/19/1997

	AVIATI	Occurrence Type: Incident												
First Pilot	Information													
Name						City					State	е	Date of Birth	Age
On File						On Fil	ile				On F	File	On File	44
Sex: M	Seat Occupied	n Pilot	t Certificate Number: On File											
Certificate(s): Airline Transport														
Airplane Ra	ating(s): Multi	i-engine Lar	nd											
Rotorcraft/0	Glider/LTA: None	<u> </u>												
Instrument	Rating(s): Airpl	lane												
Instructor F	Rating(s): None	е												
Type Rating/Endorsement for Accident/Incident Aircraft? Yes  Current Biennial Flight Review?														
Medical Ce	rt.: Class 1	Medica	al Cert. Statu	s: Valid Me	dicalno wa	aivers/l	im.		Da	e of La	st Me	dical E	xam: 12/1997	
		•							'					
- Flight Tim	e Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night		Actual	Instrument ual Simula		R	Rotorcraft	Glider	Lighter Than Air
Total Time		7000												
Pilot In Cor	nmand(PIC)													
Instructor											$\bot$			
Last 90 Day						-					$\perp$			
Last 30 Day						-			_		+			
Last 24 Ho						<del>                                     </del>						Τ.		
Seatbelt Us	sed?	Shou	lder Harness	Used?			Toxico	ology Pe	rformed	?		Se	econd Pilot? Ye	es
Flight Pla	n/Itinerary													
	tht Plan Filed: IF	R												
Departure F						T	State		Airport Identifier		r	Departure Time		Time Zone
PALM SP	RINGS						CA		PSP			0000		
Destination							State	te Airport Iden		dentifie	er			
Same as	Accident/Incide	ent Location					SFO							
Type of Cle	earance:													
Type of Air	space:													
Weather	Information													
Source of I	Briefing:													
Method of	Briefing:													
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FACTUAL REPORT
AVIATION

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Occurrence Type: Incident

	ETYBOR			ccurrenc	e rype:	inciden										
Weather Information																
WOF ID	Observation Time	Time Zone	WO	F Elevati	on	WOF D	istance Fro	stance From Accident Site Direction From Accident Sit					ite			
SFO	1815	PST		0 Ft	. MSL				0 NM 0 Deg. M							
Sky/Lowes	st Cloud Condition: Clear	١					0 Ft. A	(GL	Condition o	Condition of Light: Night/Dark						
Lowest Ce	illing: None			0 Ft.	AGL	Visib	ility:	10	SM	Alti	meter:	30.00	"Hg			
Temperatu	ıre: 11 °C [	Dew Point:		°C	Wind	Direction	: 200			Density Altitude:						
Wind Spee	ed: 5	Gusts:			Weather Condtions at Accident Site: Visual Conditions											
Visibility (R	RVR): 0 Ft.	Visibility	(RVV)	0	SM	Intensit	y of Precip	itation:	Unknown							
Restriction	s to Visibility: None															
Type of Pre	Type of Precipitation: None															
Accident	Information															
Aircraft Dar	mage: None		Ai	rcraft Fire	e: None	<del>-</del>			Aircraft Exp	losio	n None					
Classificati	on: U.S. Registered/U.	.S. Soil														
- Injury Su	mmary Matrix	Fatal	Serious	Mino	or	None	TOTAL									
First Pi	lot					1		1								
Second	d Pilot					1		1								
Studen	ut Pilot							7								
Flight II	nstructor							7								
Check	Pilot							7								
Flight E	Engineer							7								
Cabin A	Attendants					5		5								
Other C	Crew							7								
Passen	ngers					68	6	8								
- TOTAL A	ABOARD -					75	7	5								
Other G	Ground	0	ī	0	0			0								
- GRAND	O TOTAL -	0		0	0	75		_								

National Transportation Safety Board

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Occurrence Date: 12/19/1997

Occurrence Type: Incident

Αc	lm	inis	trati	ve	Ini	fori	mati	ion

Investigator-In-Charge (IIC)

R G. MUCHO

Additional Persons Participating in This Accident/Incident Investigation:

CHRISTOPHE WERLHOF WP-SFO-CMO SAN FRANCISCO, CA 94010