Gear fire, McDonnell Douglas MD-83, April 17, 1994

Micro-summary: This McDonnell Douglas MD-83 experienced a gear fire after landing.

Event Date: 1994-04-17 at 1855 PDT

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

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

Cautions:

- 1. Accident reports can be and sometimes are revised. Be sure to consult the investigative agency for the latest version before basing anything significant on content (e.g., thesis, research, etc).
- 2. Readers are advised that each report is a glimpse of events at specific points in time. While broad themes permeate the causal events leading up to crashes, and we can learn from those, the specific regulatory and technological environments can and do change. Your company's flight operations manual is the final authority as to the safe operation of your aircraft!
- 3. Reports may or may not represent reality. Many many non-scientific factors go into an investigation, including the magnitude of the event, the experience of the investigator, the political climate, relationship with the regulatory authority, technological and recovery capabilities, etc. It is recommended that the reader review all reports analytically. Even a "bad" report can be a very useful launching point for learning.
- 4. Contact us before reproducing or redistributing a report from this anthology. Individual countries have very differing views on copyright! We can advise you on the steps to follow.

Aircraft Accident Reports on DVD, Copyright © 2006 by Flight Simulation Systems, LLC All rights reserved.

www.fss.aero

National Transportation Safety Board NTSB ID: SEA94IA103 Aircraft Registration Number: N931AS FACTUAL REPORT Occurrence Date: 04/17/1994 Most Critical Injury: None Occurrence Type: Incident Investigated By: NTSB Location/Time Nearest City/Place State Zip Code Local Time Time Zone 1855 PDT **SEATTLE** WA 98188 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 Sightseeing Flight: No Air Medical Transport Flight: No

Narrative

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

On April 17, 1994, approximately 1855 Pacific daylight time (PDT), an Alaska Airlines McDonnell Douglas MD-83, N931AS, experienced a fire in the area of the left main gear while taxiing to the passenger loading gate at Seattle-Tacoma International Airport, Seattle, Washington. After stopping at the gate and requesting fire equipment, the captain ordered an emergency evacuation of the aircraft. There were no reported injuries to the 132 passengers, six crew members, or the single jump seat occupant. The aircraft, which departed San Francisco International Airport on an IFR flight plan at 1655 PDT, was operating in visual meteorological conditions at the time of the incident. This mishap did not involve the activation of an ELT.

According to tower personnel, smoke was seen coming from the area of the left main gear as the aircraft taxied to the gate. The tower notified the aircrew of the situation and, as the aircraft stopped at the gate, flames began coming from the same area, prompting the captain to initiate an emergency evacuation. Approximately half of the occupants evacuated through the normal jetway exit, while the other half exited using the tail cone slide.

The investigation has revealed that the left main gear wheel hub experienced a fatigue fracture which originated in the hub grease dam groove. Subsequent to the hub failure, hydraulic fluid, which was leaking from a damaged brake component, was ignited by a hot brake pad.

National Transportation Safety Board
FACTUAL REPORT

NTSB ID: SEA94IA103

Occurrence Date: 04/17/1994

7													
AVIATION Occurr			rrence Type: Incident										
Landing Facility/Approach Inf	formation												
Airport Name Air			Airport	ID:	Airport Elevat	ion	Runway Used		Runway Length		h	Runv	way Width
SEATTLE-TACOMA INT.			SEA		430 Ft.	MSL	. 34R 1190		11900	00		150	
Runway Surface Type: Asphalt													
Runway Surface Condition: Dry													
Type Instrument Approach:													
VFR Approach/Landing: Full Stop													
Aircraft Information													
Aircraft Manufacturer MCDONNELL DOUGLAS				lodel/S MD-83						Serial 4923	al Number 232		
Airworthiness Certificate(s): Transport													
Landing Gear Type: Retractable - Tricycle													
Homebuilt Aircraft? No	Number of Seats:	ats: 147 Certified Max Gross Wt. 1495						149500	0 LBS Number		er of En	r of Engines: 2	
Engine Type: Turbo Fan					Engine Manufacturer: Model/Series: JT8D-217A								ed Power: 850 LBS
- Aircraft Inspection Information													
Type of Last Inspection	Date o	Date of Last Inspection Time Sind				nce Last Inspection			Airfran	ne To	tal Time		
Continuous Airworthiness 04					04/1994 41					ours		25	773 Hours
- Emergency Locator Transmitter (I	ELT) Information												
ELT Installed?	ELT Installed? ELT Operated? ELT Aided in Locating Accident Site?												
Owner/Operator Information													
Registered Aircraft Owner			Str	reet Ad	dress P.O. BO	< 689	900						
ALASKA AIRLINES			Cit	City							State	е	Zip Code
SEATTLE WA 98168 Street Address									98168				
Operator of Aircraft Same as Reg'd Aircraft Owner													
Same as Reg'd Aircraft Owner				City							State	е	Zip Code
Operator Does Business As: Operator Designator Code: ASAA													
- Type of U.S. Certificate(s) Held:													
Air Carrier Operating Certificate(s):	Flag Carrier/Don	nestic											
Operating Certificate:	Operating Certificate: Operator Certificate:												
Regulation Flight Conducted Under: Part 121: Air Carrier													
Type of Flight Operation Conducted: Scheduled; Domestic; Passenger Only													
		FACT	UAL R	EPOR	T - AVIATI	ON							Page 2

National Transportation Safety Board

FACTUAL REPORT

AVIATION

NTSB ID: SEA94IA103

Occurrence Date: 04/17/1994

7. % 0.00 \$													
AVIATION Occurrence Type: Incider						ident							
First Pilot	t Information												
Name Cit										Sta	ite	Date of Birth	Age
On File O							е			On	File	On File	34
Sex: M	Seat Occupied	n Pilot			C	ertificat	te Num	ber: On File					
Certificate(s): Airlir	ne Transpor	t; Commerc	ial					•				
Airplane Rating(s): Multi-engine Land; Single-engine Land													
Rotorcraft/0	Glider/LTA: None	e											
Instrument Rating(s): Airplane													
Instructor F	Rating(s): Airpl	ane Single-	engine; Inst	rument Airp	olane								
Type Rating	g/Endorsement fo	or Accident/In	cident Aircra	ft? Yes			Curre	ent Bier	nial Flight	Reviev	w?		
Medical Ce	ert.: Class 1	Medica	al Cert. Status	: Valid Me	dicalno wa	aivers/li	m.		Date of I	_ast M	edical E	xam: 02/1994	
		·							1				
- Flight Tim	Time Matrix All A/C This Make Airplane Single Engine				Airplane Mult-Engine	Night Act		Inst	Instrument Simulated		Rotorcraft	Glider	Lighter Than Air
Total Time		8899	3764										
Pilot In Cor	mmand(PIC)	3692	379										
Instructor													
Last 90 Da	ys	141	141										
Last 30 Da		52	52							_			
Last 24 Ho		[6]	6			<u> </u>							
Seatbelt Used? Yes Shoulder Harness Used? Yes Toxicology Performed? No Second Pilot? Yes								es .					
Flight Pla	ın/Itinerary												
	ght Plan Filed: IF	 R											
Departure Point							State Ai		Airport Identifier		Departure Time		Time Zone
SAN FRANCISCO									SFO		1655		PDT
Destination State Airport Identifier													
Same as Accident/Incident Location													
Type of Cle	earance:												
Type of Air	space: Class	D											
Weather	Information												
Source of	Briefing:												
Method of	Briefing:												
				FACTUAI	REPORT	- AVIA	TION						Page 3

National Transportation Safety Board
FACTUAL REPORT
AVIATION

NTSB ID: SEA94IA103

Occurrence Date: 04/17/1994

Occurrence Type: Incident

	ETYBOR		Occ	currence 1	ype. In	nciaent								
Weather Information														
WOF ID	Observation Time	Time Zone	WOF E	Elevation	V	WOF Distance From Accident Site			nt Site		Direction From	n Accident S	ite	
	0000			0 Ft. MS	SI_				0 NM		0 Deg. Mag.			
	<u> </u>							Т.						
Sky/Lowes	st Cloud Condition: Sca	itered				17	000 Ft. AGL	- 0	Condition of Light: Dusk					
Lowest Ce	iling: None			0 Ft. AGI	L	Visibil	lity: 2	20	SM	Alti	meter:	30.00	"Hg	
Temperatu	ure: 17 °C	Dew Point:	10	o ∘c w	Vind Dir	rection:	340			Dei	nsity Altitude:		Ft.	
Wind Spee	Wind Speed: 3 Gusts: Weather Condtions at Acciden						ent Site:	: Visual C	ond	itions				
Visibility (R	RVR): 0 Ft.	. Visibility	y (RVV)	0 S	M II	Intensity	of Precipitati	tion: Un	nknown					
Restriction	Restrictions to Visibility: None													
Type of Pre	ecipitation: None													
Accident Information														
Aircraft Damage: Minor Aircraft Fire: Ground							А	Aircraft Expl	losio	n None				
Classificati	on: U.S. Registered/L	J.S. Soil												
- Injury Su	mmary Matrix	Fatal	Serious	Minor	No	one	TOTAL							
First Pi	lot					1	1							
Second	d Pilot					1	1							
Studen	t Pilot	† †			1									
Flight I	nstructor				1									
Check	Pilot				1									
Flight E	Engineer				\top									
Cabin /	Attendants				\top	4	4							
Other C					1									
Passen	ngers					133	133							
- TOTAL A	ABOARD -					139	139							
Other G		0	0		0		0							
- GRANE	O TOTAL -	0	0		0	139	139							
						•								

National Transportation Safety Board

FACTUAL REPORT AVIATION

NTSB ID: SEA94IA103

Occurrence Date: 04/17/1994

Occurrence Type: Incident

	ormation

Investigator-In-Charge (IIC)

ORRIN K. ANDERSON,

Additional Persons Participating in This Accident/Incident Investigation:

JOHN HUBBARD SEATTLE FAA FSDO RENTON, WA,