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## Tread separation and engine failure, Airbus A300-B4-203, August 24, 1997

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**Micro-summary:** This A300 experienced a main landing gear tread separation, followed by a #2 engine failure.

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**Event Date:** 1997-08-24 at 1350 PDT


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


**Investigative Body's Web Site:** <http://www.nts.gov/>


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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).
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		NTSB ID: LAX971A300		Aircraft Registration Number: N862PA	
		Occurrence Date: 08/24/1997		Most Critical Injury: None	
		Occurrence Type: Incident		Investigated By: NTSB	
Location/Time					
Nearest City/Place LOS ANGELES		State CA	Zip Code 90045	Local Time 1350	Time Zone PDT
Airport Proximity: On Airport		Distance From Landing Facility: 1		Direction From Airport: 360	
Aircraft Information Summary					
Aircraft Manufacturer Airbus Industrie		Model/Series A300 B4-203		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>On August 24, 1997, at 1350 hours Pacific daylight time, an Airbus A300 B4-203, N862PA, lost power to the number 2 engine and aborted the takeoff on runway 24L at Los Angeles International Airport, Los Angeles, California. The airplane sustained minor damage. There were no injuries to the 3 cockpit crewmembers, 8 cabin crewmembers, and 254 passengers. The airplane was being operated on an instrument flight plan by Pan American World Airways as flight 6, a scheduled domestic passenger flight under 14 CFR Part 121. The flight was destined for John F. Kennedy International Airport, Jamaica, New York. Visual meteorological conditions prevailed.</p> <p>The cockpit crew reported feeling a vibration in the aircraft during the takeoff roll and then hearing a loud noise while accelerating past 145 knots. According to the captain, the airplane was loaded heavily with fuel and passengers and the takeoff decision speed (V1) was 159 knots. The captain rejected the takeoff and stopped the airplane on the 10,285-foot-long runway with about 800 feet remaining.</p> <p>Postincident examination revealed that the tire tread was absent from the number 3 tire on the right-hand main landing gear. One piece of black rubber resembling the tire tread (2-4 inches long) was found lodged in the fan outlet guide vanes. Black smearing marks were observed on several of the fan blades and bent stator vanes of the engine, which also resembled the tire tread material. The number 2 engine fan was destroyed and several outlet guide vanes were damaged. There was a hole through the engine fan cowl at the 6 o'clock position. The engine's accessory gearbox was fractured to the left of the constant speed drive (CSD) and generator. Oil was leaking from the fracture and two broken oil return lines from the CSD and generator. Minor damage was also observed on the right-hand landing gear door, inboard flap, and all-speed aileron.</p> <p>Metallurgical examination of the failed compressor fan blades revealed that features noted along the fracture surfaces were consistent with ductile overload and rapid tensile shear. The metallurgist noted that there was no evidence of metallurgical fatigue present at the fractures and opined that liberation of the blade tips occurred as a result of a "single overload event."</p> <p>The aircraft's Lockheed model 209F flight data recorder was read out and evaluated at the Safety Board's laboratory in Washington, D.C. The specialist's report is attached. The report states that both engines were operating within normal limits for a period of time before a positive lateral acceleration and a decrease in longitudinal acceleration were recorded at FDR time 5195.2 seconds, after which the aircraft decelerated. The report also notes that there were four parameters reporting erroneous values. The four were engine vibration monitors for the fan and compressor of each engine.</p>					
FACTUAL REPORT - AVIATION					
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 <b>National Transportation Safety Board</b> <b>FACTUAL REPORT</b> <b>AVIATION</b>		NTSB ID: LAX971A300			
		Occurrence Date: 08/24/1997			
		Occurrence Type: Incident			
<b>Landing Facility/Approach Information</b>					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
LOS ANGELES INTERNATIONAL	LAX	126 Ft. MSL	24L	10285	150
Runway Surface Type: Concrete					
Runway Surface Condition: Dry					
Type Instrument Approach:					
VFR Approach/Landing:					
<b>Aircraft Information</b>					
Aircraft Manufacturer		Model/Series		Serial Number	
Airbus Industrie		A300 B4-203		211	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 265	Certified Max Gross Wt.	351000 LBS	Number of Engines: 2	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Turbo Jet	GE	CF6-50C2	51000 LBS		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time		
Unknown		Hours	Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? No	ELT Operated?	ELT Aided in Locating Accident Site?			
<b>Owner/Operator Information</b>					
Registered Aircraft Owner		Street Address			
EAL DELAWARE VIII CORP.		P.O. BOX 8985			
		City	State	Zip Code	
		WILMINGTON	DE	19899	
Operator of Aircraft		Street Address			
PAN AMERICAN WORLD AIRWAYS, IN		9300 N.W. 36TH STREET			
		City	State	Zip Code	
		MIAMI	FL	33178	
Operator Does Business As:			Operator Designator Code: UNK		
- Type of U.S. Certificate(s) Held:					
Air Carrier Operating Certificate(s): Flag Carrier/Domestic					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 121: Air Carrier					
Type of Flight Operation Conducted: Scheduled; Domestic; Passenger/Cargo					

 <p><b>National Transportation Safety Board</b> <b>FACTUAL REPORT</b> <b>AVIATION</b></p>	NTSB ID: LAX97IA300	
	Occurrence Date: 08/24/1997	
	Occurrence Type: Incident	

**First Pilot Information**

Name On File	City On File	State On File	Date of Birth On File	Age 52
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Sex: M	Seat Occupied: Left	Principal Profession: Civilian Pilot	Certificate Number: On File
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Certificate(s): Airline Transport; Flight Engineer

Airplane Rating(s): Multi-engine Land; Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Type Rating/Endorsement for Accident/Incident Aircraft? Yes	Current Biennial Flight Review?
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Medical Cert.: Class 1	Medical Cert. Status: Valid Medical--w/ waivers/lim.	Date of Last Medical Exam: 03/1997
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time										
Pilot In Command(PIC)										
Instructor										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? No	Second Pilot? Yes
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**Flight Plan/Itinerary**

Type of Flight Plan Filed: IFR

Departure Point Same as Accident/Incident Location	State	Airport Identifier LAX	Departure Time 1350	Time Zone PDT
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Destination JAMAICA	State NY	Airport Identifier JFK	
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Type of Clearance: IFR

Type of Airspace: Class B

**Weather Information**

Source of Briefing: Company

Method of Briefing:

 <p><b>National Transportation Safety Board</b> <b>FACTUAL REPORT</b> <b>AVIATION</b></p>	NTSB ID: LAX97IA300
	Occurrence Date: 08/24/1997
	Occurrence Type: Incident

<b>Weather Information</b>					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
LAX	1350	PDT	126 Ft. MSL	1 NM	180 Deg. Mag.
Sky/Lowest Cloud Condition: Clear			0 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: None		0 Ft. AGL		Visibility: 10 SM	Altimeter: 29.00 "Hg
Temperature: 27 °C	Dew Point: 17 °C	Wind Direction: 270		Density Altitude: Ft.	
Wind Speed: 15	Gusts:	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): 0 Ft.	Visibility (RVV) 0 SM	Intensity of Precipitation: Unknown			
Restrictions to Visibility: None					
Type of Precipitation: None					

<b>Accident Information</b>		
Aircraft Damage: Minor	Aircraft Fire: None	Aircraft Explosion: None

Classification: U.S. Registered/U.S. Soil					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot				1	1
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer				1	1
Cabin Attendants				8	8
Other Crew					
Passengers				254	254
- TOTAL ABOARD -				265	265
Other Ground	0	0	0		0
- GRAND TOTAL -	0	0	0	265	265

National Transportation Safety Board

**FACTUAL REPORT**

**AVIATION**



NTSB ID: LAX97IA300

Occurrence Date: 08/24/1997

Occurrence Type: Incident

Administrative Information

Investigator-In-Charge (IIC)

THOMAS H. WILCOX

Additional Persons Participating in This Accident/Incident Investigation:

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