Nosewheel stuck 90°, Airbus A320, N536JB, September 21, 2005

Micro-summary: This airplane had its nosewheel stuck at a 90 degree angle while attempting to retract.

Event Date: 2005-09-21 at 1818 PDT

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

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

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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!

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National Transportation Safety Board PRELIMINARY REPORT			NTSB	ID: LAX05IA312		Most Critical Injury: None				
			Occur	rence Date: 09/21	1/2005	Investigated By: NTSB				
AVIATION			Occur	rrence Type: Incid	ent	ICAO Report Submitted:				
Location/Time										
Nearest City/Place		State		Zip Code	Local Time	Time Zone				
Los Angeles		CA		90045	1818	PDT				
Aircraft Information										
Registration Number Aircraft Manufacturer						Model/Series N	Model/Series Number			
N536JB	Airbus Indu	ustrie				A320				
Type of Aircraft: Airplane				Homebuilt Aircra	aft? No					
Injury Summary:	Fatal			Serious	Minor None		None	146		
Sightseeing Flight: No				Air Medical Tr	ansport Flight: No)	·			
Narrative										
Brief marative statement of facts, conditions and circumstances periment to the acident/inident: On September 21, 2005, at 1818 Pacific daylight time, Jet Blue Airlines flight 292, an Airbus A320, N536JB, landed at Los Angeles International Airport, Los Angeles, California, with the nose wheels cocked 90 degrees. Jet Blue Airlines, Inc., was operating the airplane as a scheduled domestic passenger flight under the provisions of 14 CFR Part 121. The airline transport pilot licensed captain, first officer, 4 flight attendants, and 140 passengers were not injured. The flight departed Burbank, California, at 1531, as a nonstop to JFK Airport, New York, New York. Visual meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan had been filed. The first officer (FO) flew the first leg. The initial departure did not indicate any problems, and he observed a positive rate of climb. After the captain attempted to retract the landing gear, two error messages displayed on the Electric Centralized Aircraft Monitoring (ECAM) system: nose gear shock absorber and nose wheel steering fault. There was no master warning so the FO continued flying the airplane while the captain atomitation (FCAM). The FO flew the flight crew operating manual (FCOM). The FCOM noted that the nose gear "may be caught at 90 degrees." The captain continued to evaluate the problem to ascertain the systems' status. The flight diverted to Long Beach, California. The captain decided to perform a fly-by of the tower for verification on the gear status. The tower, Jet Blue ground personnel, and a local news helicopter advised him that the nose gear was cocked 90 degrees to the left. The flight crew decided to divert to Los Angeles. The crew flew for several hours to burn fuel so that they could land at a lighter weight.										
The captain communicated with the cabin crew and passengers. The cabin crew emptied the first three rows of seats, and moved the baggage as far aft as possible. They placed able-bodied persons in the exit rows, and removed all baggage and paperwork from the seating area. They showed the able-bodied persons how to operate the doors, and gave additional instructions. The flight attendants spoke to each passenger individually prior to the landing to ensure that they knew the emergency procedures that would take place and how to properly brace themselves. The flight attendants checked and double checked each others' work to ensure that everything was completed and would go according to plan.										
The captain took note of the fuel burn to ensure that the center of gravity stayed within limits. The captain also advised the cabin crew that in the event the nose gear collapsed, evacuation from the aft doors was not available so everyone would deplane from the forward exits. The flight crew advised the cabin crew to take the emergency procedures up to the point of egress, at which time								uation from flight crew which time		
1	PRELIMIN	NARY	INFOF	RMATION - SUB	BJECT TO CHANG	GΕ		Page 1		

National Transportation Safety Board	NTSB ID: LAX05IA312
PRELIMINARY REPORT	Occurrence Date: 09/21/2005
ÁVIATION ETYBON	Occurrence Type: Incident
Narrative (Continued)	

Narrative (Continued)

the captain would advise the method.

Prior to touchdown, the captain announced to "brace" and the flight attendants also transmitted "brace" over the public address system.

The captain flew the airplane for the landing. He touched down at 120 knots, and applied normal braking at 90 knots. He held the nose gear off of the ground as long as possible. At 60 knots, the flight crew shut down the engines. They did not use ground spoilers, reverse thrust, or auto braking. During the landing, the forward cabin crew could smell burnt rubber. The cabin crew remained at their stations as previously defined by the captain. The air traffic control tower confirmed that there was no fire, and the captain announced this to the cabin crew. After this notification, the passengers deplaned normally using an air stair.

Both nose tires collapsed during the landing roll, and about half of the two wheels was ground off.

Maintenance personnel jacked the airplane up, and removed the damaged wheels. They installed a right nose wheel, and towed the airplane to a maintenance hangar.

Maintenance personnel removed the cockpit voice recorder (CVR) and digital flight data recorder (DFDR). The National Transportation Safety Board investigator-in-charge (IIC) sent them to the Safety Board Vehicle Recorder's Division for examination.

Maintenance records indicated that Jet Blue maintenance technicians replaced a proximity sensor on the nose wheel prior to the previous flight's departure from New York earlier in the day.

A post flight maintenance report indicated the following faults:

At 1531 PDT	L/G Shock Absorber Fault (2)
At 1532 PDT	Wheel N/W Strg Fault.

The IIC retained the nose gear assembly and several other components for examination.

National Transportation Safety Board PRELIMINARY REPORT		NTSB ID: LAX05IA312 Occurrence Date: 09/21/2005										
						1						
AVIATION ETYBON		Occurrence Type: Incident			1							
Other A	Aircraft Involved			51								
Registration Number Aircraft Manufacturer								Model/S	eries Nur	nber		
Accider	nt Information											
Aircraft Damage: Minor Accident Occurred During: Landing												
Property Damage:												
Crew	N	ame			Certificate No.				Injury			
Pilot	On File				On File			None				
2	On File				On	n File			None			
3												
4												
5												
6												
Operate	Operator Information											
NameOperator DJet Blue Airlines, Inc.YENA					esigr)	esignator Code Doing Business As						
			City Fore	,				State NY	Zip Code 11375	;		
-Type of Certificate(s) Held:												
Air Carrier Operating Certificate(s):												
Operating Certificate: Operator Certificate:												
Regulatio	on Flight Conducted Und	der: Part 121: Air C	Carrier									
Type of F	Flight Operations Conduc	cted: Scheduled; Do	omestic; Pas	senger	Only	/						
Flight F	Plan/Itinerary											
	Flight Plan Filed: IFR											
Last Departure Point						State	Airpor	t Identifier				
Burbank						CA	BUR					
Destination						State		t Identifier				
New York						NY	JFK					
Weathe	er Information						•	1				
Investigator's Source:					Facility ID: LAX			Observa	tion Time	(Local): 1819		
Sky/Lowe	y/Lowest Cloud Condition: Few				7000 Ft. AGL							
Lowest C	Ceiling: None		Ft. A	AGL	Vi	isibility:	10	SM	1 Altin	neter: 2	9.91	"Hg
		PRELIMINARY	' INFORMA'	TION - S	SUB	BJECT TO (CHAN	GE				Page 2

National Transportation Safety Board PRELIMENARY REPORT			NTSB ID: LAX05IA312							
			Occurrence Date: 09/21/2005							
			urrence Ty	/pe: Incident		1				
Weather Information	(Continued from page 2)					I				
Temperature: 18 °C		6°C	Wind D	rection: 250						
Wind Speed: 8 Kts	. Gusts: K	Kts. Weather Conditions at Accid				isual Co	nditions			
Administration Data										
Notification From										
FAA AWP Operations Cente	r				09/21	1/2005				
FAA District Office/Coordinator Los Angeles, CA FSDO Monico Robles		Investigator-In-Charge (IIC) Howard D. Plagens					·			