
Headset operator injury, Boeing 757-200, August 19, 1994

Micro-summary: This Boeing 757-200 ran over a headset operator while being pushed back.


Event Date: 1994-08-19 at 0924 MST


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

Investigative Body's Web Site: <http://www.nts.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.
-

		NTSB ID: LAX94LA333		Aircraft Registration Number: N901AW	
		Occurrence Date: 08/19/1994		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place PHOENIX		State AZ	Zip Code 85034	Local Time 0924	Time Zone MST
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer BOEING		Model/Series 757-200		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
HISTORY OF FLIGHT					
<p>On August 19, 1994, at 0924 mountain standard time, a Boeing 757- 200, N901AW, operated by America West Airlines, Inc., as flight 680, seriously injured a ramp agent (headset operator) during pushback from gate B-13 at the Phoenix International Airport, Phoenix, Arizona. The airplane was not damaged, and none of the 7 crewmembers or 160 passengers were injured. The scheduled domestic passenger flight to Newark, New Jersey, was originating at the time of the accident.</p>					
<p>The ground accident occurred as the pushtug driver was moving the airplane out of the gate and turning it into a "tail east" direction, which was approximately 90 degrees from the airplane's initial position. The headset operator was in charge of the pushback, and he was walking and/or running alongside the airplane's nose. His headset interphone cord was plugged into the airplane's nosegear strut communications panel. Neither cockpit crewmember indicated that the pushback was abnormal.</p>					
<p>The pushtug driver reported that he was pushing "at a brisk walking speed." On at least one occasion during the pushback, the driver observed that the headset operator "was about five feet from the airplane's wheels." The pushtug driver reported that he began to turn the airplane, and he looked elsewhere for a second to ensure that the way was clear. Just as the driver looked back toward the airplane, he observed the top of the headset operator's head move backwards. The pushtug driver further reported that he applied the brakes, and he initially believed that the headset operator had tripped. However, when he got up to look, he saw that the headset operator's right leg had been run over by the airplane's wheel which was still on top of it.</p>					
<p>Several other witnesses reported observing the accident. One witness reported that just before the headset operator was struck he was too close to the airplane and "was looking down." Another witness reported that the headset operator was "running" beside the airplane in order to keep up with it, and he ". . . couldn't get out of the way when the tug turned the aircraft tail east."</p>					
<p>The National Transportation Safety Board made several attempts at obtaining a statement from the headset operator. As of March 31, 1995, no statement has been received.</p>					
<p>In the airline's completed "Aircraft Accident Report," NTSB Form 6120.1, the airline reported that during the push, "the nose gear caught the headset operator by the foot, and his right leg was crushed under the nose gear wheel. This resulted in the amputation of [his] right leg above the knee."</p>					
GROUND EQUIPMENT AND USAGE INFORMATION					
According to the airline, the headset operator was responsible for the safe accomplishment of the					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: LAX94LA333
	Occurrence Date: 08/19/1994
	Occurrence Type: Accident

Narrative (Continued)

pushback and communications with the flight deck. Regarding the position of the headset operator relative to the airplane, during the pushback operation the operator's training program required that the headset operator stay 10 feet away from the airplane's nose wheel. In another training document, the headset operator was directed to stand as far away from the aircraft as his headset cord would allow. The airline reported that the length of the connecting cord which the headset operator had been using was between 15 and 16 feet. (See the operator's "Basic Ramp Service" and "Ramp Safety Program" training guides for additional requirements and drawings.)

PERSONNEL INFORMATION

The headset operator was hired by America West Airlines in July, 1994. The airline reported that the employee had completed the required course of ramp safety and pushback instruction, and he was authorized to perform the duties of headset operator. The accident occurred while the employee was performing his first solo headset pushback operation.

PREVIOUS ACCIDENT HISTORY

According to the airline, on November 6, 1989, at 1055, a Boeing 757 was being pushed back for takeoff in Phoenix. As the tug was moving the airplane, the headset operator walked under its fuselage and appeared to stumble. The headset operator's right leg was severely injured when the nose wheel contacted it.

ADDITIONAL INFORMATION


Airline management reported that following the 1989 accident it conducted a review of its pushback procedures. The procedure which required that the headset operator be plugged into the airplane's nose communication panel (in proximity to the nose gear) was not changed.


On June 25, 1993, the National Transportation Safety Board issued Safety Recommendation No. A-93-55 to the Acting Administrator of the Federal Aviation Administration (FAA). In pertinent part, the recommendation stated that following the Safety Board's investigations of several pushback accidents which resulted in personal injury to ground service personnel, the Safety Board recommended that the FAA: (1) inform air carriers of the circumstances of specific pushback accidents; and (2) urge air carriers to conduct pushback operations in a manner which eliminated the need for ground service personnel to be close to the airplane landing gear while the airplane is in motion. (See the Safety Recommendation for complete details.)

On April 11, 1994, the FAA's principal operations inspector for America West Airlines provided the airline with a copy of the FAA Joint Flight Standards Information Bulletin FSAT 94-05 (Headset Accident). This bulletin provided a brief overview of a pushback accident and made reference to the Safety Board Recommendation No. A-93-55.

In response to the bulletin, on April 18, 1994, the airline transmitted a copy of it to all station and hub managers, and station safety supervisors. The airline specifically directed its supervisors to "brief and remind personnel" that they are to be a minimum of 10 feet from the nose wheel whenever positioned on the headset. The airline's management, however, did not modify the design of its headset operator equipment in such manner as to eliminate the requirement for the headset operator to be standing in proximity to the nose gear.

On November 7, 1994, the airline reported to the Safety Board that a review had been completed of its policies and procedures regarding the safety of its ramp operations. The airline reported that it would change its pushback procedures to "eliminate the necessity of a headset agent walking in the proximity of any aircraft nose wheel." The revised procedures would involve using new equipment which would be in place throughout the airline's system by January 1995.

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: LAX94LA333				
		Occurrence Date: 08/19/1994				
		Occurrence Type: Accident				
Landing Facility/Approach Information						
Airport Name PHOENIX SKY HARBOR INTL		Airport ID: PHX	Airport Elevation 1133 Ft. MSL	Runway Used 0	Runway Length	Runway Width
Runway Surface Type:						
Runway Surface Condition: Dry						
Type Instrument Approach:						
VFR Approach/Landing:						
Aircraft Information						
Aircraft Manufacturer BOEING		Model/Series 757-200		Serial Number 23321		
Airworthiness Certificate(s): Transport						
Landing Gear Type: Retractable - Tricycle						
Homebuilt Aircraft? No		Number of Seats: 190	Certified Max Gross Wt. 241000 LBS		Number of Engines: 2	
Engine Type: Turbo Jet		Engine Manufacturer: Rolls-Royce		Model/Series: RB211-535E4	Rated Power: 41000 LBS	
- Aircraft Inspection Information						
Type of Last Inspection Continuous Airworthiness		Date of Last Inspection 08/1994	Time Since Last Inspection Hours		Airframe Total Time 35188 Hours	
- Emergency Locator Transmitter (ELT) Information						
ELT Installed? No		ELT Operated?		ELT Aided in Locating Accident Site?		
Owner/Operator Information						
Registered Aircraft Owner MERIDIAN TRUST COMPANY		Street Address 35 NORTH SIXTH STREET				
		City READING		State PA	Zip Code 19601	
Operator of Aircraft AMERICA WEST AIRLINES, INC.		Street Address 4000 E. SKY HARBOR BLVD.				
		City PHOENIX		State AZ	Zip Code 85034	
Operator Does Business As:				Operator Designator Code: AWXA		
- 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 Only						

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: LAX94LA333
	Occurrence Date: 08/19/1994
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 49
-----------------	-----------------	------------------	--------------------------	-----------

Sex: M	Seat Occupied: Left	Principal Profession: Civilian Pilot	Certificate Number: On File
--------	---------------------	--------------------------------------	-----------------------------

Certificate(s): Airline Transport; Flight Instructor

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

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

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

Type Rating/Endorsement for Accident/Incident Aircraft? Yes	Current Biennial Flight Review?
---	---------------------------------

Medical Cert.: Class 1	Medical Cert. Status: Valid Medical--w/ waivers/lim.	Date of Last Medical Exam: 06/1994
------------------------	--	------------------------------------

- 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	15000	1200	800	14200	5000	1000	1000			
Pilot In Command(PIC)	13700	1200	700	1300	4500	800	1000			
Instructor	665		300	365						
Last 90 Days	220	220		220	100	20				
Last 30 Days	75	75		75	30	5				
Last 24 Hours	8	8		8						

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? No	Second Pilot? Yes
--------------------	----------------------------	--------------------------	-------------------

Flight Plan/Itinerary

Type of Flight Plan Filed: IFR

Departure Point Same as Accident/Incident Location	State	Airport Identifier	Departure Time 0923	Time Zone MST
---	-------	--------------------	------------------------	------------------

Destination NEWARK	State NJ	Airport Identifier EWR	
-----------------------	-------------	---------------------------	--


Type of Clearance:

Type of Airspace:

Weather Information

Source of Briefing: Company

Method of Briefing:

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: LAX94LA333
	Occurrence Date: 08/19/1994
	Occurrence Type: Accident

Weather Information

WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
0000			0 Ft. MSL	0 NM	0 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: 38 °C Dew Point: 3 °C Wind Direction: 100 Density Altitude: Ft.

Wind Speed: 8 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

Accident Information

Aircraft Damage: None 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					
Cabin Attendants				5	5
Other Crew					
Passengers				160	160
- TOTAL ABOARD -				167	167
Other Ground	0	1	0		1
- GRAND TOTAL -	0	1	0	167	168

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: LAX94LA333

Occurrence Date: 08/19/1994

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

WAYNE POLLACK,

Additional Persons Participating in This Accident/Incident Investigation:

RICHARD O JULIAN
FAA CMO; 4122 E. AIRLANE DRIVE
PHOENIX,, AZ 85034