Collision with walkway, Airbus A320-231, October 15, 1999

Micro-summary: This Airbus A320-231 struck a walkway between concourses while being pushed back.

Event Date: 1999-10-15 at 0918 MST

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 FACTUAL REPERT AVIATION	ID: LAX00LA01 rence Date: 10/1 rence Type: Accir	5/1999	Aircraft Registration Number: N627AW Most Critical Injury: None Investigated By: NTSB							
Location/Time										
Nearest City/Place	State	Zip Code	Local Time	Time Zone						
PHOENIX	AZ	85034	0918	MST						
Airport Proximity: On Airport	Distance Fron	n Landing Facility	:	Direction From Airport:						
Aircraft Information Summary										
Aircraft Manufacturer	Model/Serie	es			Type of Aircraft					
Airbus Industrie		A-320-231				Airplane				

Air Medical Transport Flight: No

Narrative

Sightseeing Flight: No

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

On October 15, 1999, at 0918 hours mountain standard time, America West Flight 2433, an Airbus A320-231, N627AW, collided with a pedestrian walkway during pushback in Phoenix, Arizona. The aircraft sustained substantial damage; however, none of the 89 passengers nor the 5 crewmembers were injured. The aircraft was being operated by America West Airlines, Inc., as a scheduled domestic passenger flight under 14 CFR Part 121 when the accident occurred. The airplane was originating as a nonstop flight to Tucson, Arizona. Visual meteorological conditions prevailed at the time and an IFR flight plan was filed.

At each gate, America West has a mark painted on the ramp called the "T." This "T" marking is the target point for each tug driver to place the nose wheel during pushback operations.

The captain reported that he was at gate A-2 when he received a clearance from ramp control that he was to push to the "T" and to advise when ready to taxi. The captain read the clearance to the tug driver over the intercom. The tug driver read back the clearance and began the pushback about 40 seconds later. Approximately 10 feet before reaching the "T," the aircraft's right horizontal stabilizer struck the pedestrian walkway that connects concourse A to concourse N-1. The tug driver then reported to the captain that, "I may have hit something." The captain made an announcement to the cabin about the nature of the problem and then received permission from ground safety supervisors to pull back to gate A-2.

The first officer said he noted the pushback time as 0917 but was not listening to the captain or tug driver as they pushed back.

According to statements from America West's new terminal project manager and the ramp control tower manager, during a 0845 conference call, the ramp coordinator advised the ramp 1 supervisor and team leads that pushbacks to the "T" at gate A-2 would resume as of that morning. This procedure had been previously discontinued due to the construction of the new pedestrian walkway between concourses A and N-1 that did not allow sufficient clearance for the pushback. The ramp 1 supervisor asked the ramp coordinator in the tower, as well as the A-2 team lead, for confirmation due to her concern over clearance between the airplanes and baggage carts and construction equipment that were in the vicinity. The tower coordinator and board agent both reconfirmed that all gates on ramp 1 would push to the "T".

On the America West ramp, there is no voice communication capability between the crew chief at the gate, the tug driver, and the wing walkers. According to statements of the involved ground personnel and nearby witnesses, the wing walkers were positioned in accordance with company procedures during the pushback. When the aircraft was about 20 to 25 feet from the walkway, the right wing walker signaled the tug driver to stop the push. The tug driver said he was focused on correctly positioning the nose wheel on the "T" and did not see the signal in time to stop the aircraft.

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Narrative (Continued)

Safety Board investigators examined the ramp area and found that the completed walkway structure between the concourses had reduced the amount of ramp space to 94 feet 4 inches from the "T" to the walkway; the A321 airplane is 146 feet long from nose to tail. According to the company's internal report on the event, the decision to resume the pushback to the "T" originated with the ACS project manager but should have been coordinated with ground operations safety supervisor prior to any operational changes being implemented.

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Occurrence Date: 10/15/1999

FACIUAL REPORT	urrence	Date.	10/15/1999									
AVIATION Occurrence Type: Accident												
Landing Facility/Approach Information												
Airport Name		Airport	ID:	Airport Eleva	tion	Run	nway Used Runway Le		ay Lengt	ngth Runw		/ Width
PHOENIX SKY HARBOR INT'L		PHX	HX 1135 Ft. MSL 0									
Runway Surface Type:												
Runway Surface Condition:												
Type Instrument Approach:												
VFR Approach/Landing: None												
Aircraft Information												
Aircraft Manufacturer				Series						Number		
Airbus Industrie		<i>P</i>	٩-320	-231					066			
Airworthiness Certificate(s): Transport												
Landing Gear Type: Retractable - Tricycle												
Homebuilt Aircraft? No Number of Sea	ats: 156	Ce	Certified Max Gross Wt.			164569 LBS Number			er of Engines: 2		2	
Engine Type: Turbo Fan	_						Model/Series: V2500-A1			Rated Power: 24800 LBS		
- Aircraft Inspection Information												
Type of Last Inspection		Date o	Date of Last Inspection Time Si			nce Last Insp	Airfram	e Total	Time			
Continuous Airworthiness		09/19	09/1999			199 Hours				32206 Hours		
- Emergency Locator Transmitter (ELT) Information	n											
ELT Installed? ELT Op	erated?		ELT Aided in Locating Accident Site?									
Owner/Operator Information												
Registered Aircraft Owner		Str	Street Address RODNEY SQUARE NORTH									
WILMINGTON TRUST COMPANY TRUST		Cit	City							State		ip Code
		Ctr	WILMINGTON Street Address								19	9898
Operator of Aircraft		4000 EAST SKY HARBOR BOULEVARD										
AMERICA WEST AIRLINES, INC.		City							State	- 1	ip Code	
Operator Does Business As:		PHOENIX Operator Designator Code: AW							AZ VYA	8	5034	
- Type of U.S. Certificate(s) Held:						1 0	ociator Desig	110101 00	рас. Д у	<u> </u>		
Air Carrier Operating Certificate(s): Flag Carrier/I	Domestic											
Operating Certificate: Operator Certificate:												
Regulation Flight Conducted Under: Part 121: Ai	Carrier											
Type of Flight Operation Conducted: Scheduled;	Domestic	; Passe	enger	Only								
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AVIATION Occurrence Type: Accide					cident									
First Pilot Information														
Name					City				St	tate	Date of Birth	Age		
On File					On File	On File On File								
Sex: M Seat Occupie	d: Left	Prir	ncipal Profes	sion: Civilia	n Pilot	lot Certificate Number:								
Certificate(s): Airline Transport; Commercial														
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?														
Medical Cert.: Class 1 Medical Cert. Status: Valid Medicalno waivers.								Date	of Last N	Medical	Exam: 06/199	99		
- Flight Time Matrix	Matrix All A/C This Make Airplane Airplane and Model Single Engine Mult-Engine				Night	ght Instrumer Actual			nent Simulated		Glider	Lighter Than Air		
Total Time	18300	4200												
Pilot In Command(PIC)						\dashv		_						
Instructor	170	470				+								
Last 90 Days Last 30 Days	178 48	178 48				+								
Last 24 Hours	40	40				+								
Seatbelt Used? Yes	Shou	ılder Harness	Used? Yes		Тс	oxicolo	ogy Perf	ormed?	No.	[Second Pilot?	Yes		
										I				
Flight Plan/Itinerary														
Type of Flight Plan Filed:	FR													
Departure Point					S	State Airport			port Identifier		arture Time	Time Zone		
Same as Accident/Incid	ent Location					PHX		НХ	0917		7	MST		
Destination					S	State Airpo			ntifier					
TUCSON							AZ TUC							
Type of Clearance: IFR					·		•			·				
Type of Airspace: Class	В													
Weather Information							_			_				
Source of Briefing: Comp	pany													
Method of Briefing:														
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Occurrence Date: 10/15/1999

Occurrence Type: Accident

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Weather Information													
WOF ID	Observation Time	Time Zone	WOF	Elevation		WOF Di	stance Fron	n Acci	dent Site	Direction From Accident Site			
PHX	0917	MST	1	135 Ft. M	SL				0 NM		0 Deg. Mag.		
Sky/Lowes	st Cloud Condition: Clea	r					0 Ft. AG	SL.	Condition o	f Ligh	nt: Day		
Lowest Ce	iling: None			0 Ft. AC	GL	Visibi	lity:	10	SM	Altiı	meter:	29.00	"Hg
Temperatu	ıre: 24 °C	Dew Point:		1 °C	Wind [Direction:	100			Dei	nsity Altitude:		Ft.
Wind Spee	ed: 7	Gusts:		,	Weath	er Condti	ons at Accid	dent S	ite: Visual C	Condi	itions		
Visibility (F	RVR): 0 Ft.	Visibility	(RVV)	0	SM	Intensity	of Precipita	ation:	Unknown				
Restrictions to Visibility: None													
Type of Precipitation: None													
Accident Information													
Aircraft Da	mage: Substantial		Airo	craft Fire:	None		Aircraft Explosion None						
Classificati	ion: U.S. Registered/U	.S. Soil	•										
- Injury Su	mmary Matrix	Fatal	Serious	Minor		None	TOTAL						
First Pi	ilot					1	1						
Second	d Pilot					1	1	1					
Studer	nt Pilot							1					
Flight I	nstructor							1					
Check	Pilot							1					
Flight E	Engineer							1					
Cabin /	Attendants					3	3	1					
Other (Crew							1					
Passer	ngers					89	89						
- TOTAL /	ABOARD -				\top	94	94	1					
Other (Ground	0	0		0		0	1					
- GRANI	TOTAL -	0	0		0	94	94	$oldsymbol{\mathbb{L}}_{-}$					

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National Transportation Safety Board
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FACTIAL REPORT

FACTŲAL REPÕRT AVIATION NTSB ID: LAX00LA015

Occurrence Date: 10/15/1999

Occurrence Type: Accident

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Investigator-In-Charge (IIC)

ROBERT R. CRISPIN

Additional Persons Participating in This Accident/Incident Investigation:

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