



National Transportation Safety Board Aviation Incident Factual Report

Location:	DENVER, CO	Incident Number:	FTW971A112
Date & Time:	03/01/1997, 2012 MST	Registration:	N902AW
Aircraft:	Boeing 757-2S7	Aircraft Damage:	Minor
Defining Event:		Injuries:	101 None

Flight Conducted Under: Part 121: Air Carrier - Scheduled

On March 1, 1997, at 2012 mountain standard time, a Boeing 757-2S7, N902AW, owned by Meridian Trust Company of Reading, Pennsylvania, and operated by America West Airlines, Inc., of Phoenix, Arizona, sustained minor damage when it struck an overhead bridge while taxiing at Denver, Colorado, International Airport. There were no injuries to the two cockpit crew members, 4 cabin crew members, and 95 passengers. Visual meteorological conditions prevailed, and an IFR flight plan had been filed. The airplane was being operated as Flight 491, scheduled domestic passenger service, under Title 14 CFR Part 121. The flight originated at Phoenix, Arizona, at 1819 Pacific standard time.

According to the transcript of control tower communications, the airplane landed on runway 07. At 1952:49, as its landing roll was slowing, the crew was instructed to "turn left at (taxiway) bravo four" and to remain on the tower frequency until entering taxiway "alpha sierra, then contact ramp tower contact ramp control." The crew acknowledged. At 1953:08 the tower controller asked, "You don't normally fly a (Boeing) seven five (seven) in here, do you?" The crew did not answer, and there were no further transmissions between Denver control tower and flight 491.

There was a recording equipment malfunction in the B concourse control tower. As a result, only transmissions from the controller were recorded. According to the transcript, the controller instructed "Cactus 491, (taxi via) alpha sierra to the gate (A-44), sir. Be advised that we've got men in vehicles that are working in that area. They should give way to you but if you have any problems with that commute, give me a call back." The B concourse control tower is manned by airport personnel, not FAA air traffic control (ATC) personnel. According to the assistant deputy manager of aviation, most of the personnel are former military or civilian ATC personnel and have been thoroughly trained in ground operations.

To get to gate A-44 via taxiway alpha sierra, the airplane had to pass beneath an overhead bridge connecting the main terminal building and "A" concourse. As the airplane passed beneath the bridge, its vertical stabilizer struck the bridge, crushing the vertical stabilizer cap and rudder.

The following note appears on the Jeppesen taxi chart: "CAUTION: OVERHEAD PASSENGER BRIDGE ON SOUTH SIDE OF CONCOURSE A PROVIDES 40' TAIL AND 117' WINGSPAN CLEARANCE WHEN ON TAXIWAY CENTERLINES." The following America West NOTAM (Notice to Airmen) was contained in the dispatch release and was given to the flight crew: "757 AIRCRAFT EFFECTIVE 1 MARCH, DO NOT TAXI UNDER THE PASSENGER BRIDGE SOUTH SIDE OF CONCOURSE A."

According to the captain's statement, "it appeared that there was more than adequate clearance for the tail of the aircraft, but I became more concerned with the wingtip clearance from the side support of the bridge rather than the tail clearance."

In his statement the controller on duty in the B concourse control tower wrote, "All I could see was the aircraft's lights and told the aircraft to taxi alpha sierra. I was not expecting a (Boeing) 757 on this flight and did not see the aircraft was a 757."

According to an America West spokesman, this was the first time the airline had used the Boeing 757 on this particular route. They had previously used the Airbus 320. There is adequate clearance for the Airbus 320, but not the Boeing 757, to pass beneath the overhead bridge.

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	56, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	17500 hours (Total, all aircraft), 2500 hours (Total, this make and model), 15000 hours (Pilot In Command, all aircraft), 130 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N902AW
Model/Series:	757-2S7 757-2S7	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	23322
Landing Gear Type:	Retractable - Tricycle	Seats:	200
Date/Type of Last Inspection:	03/01/1997, Continuous Airworthiness	Certified Max Gross Wt.:	240000 lbs
Time Since Last Inspection:	5 Hours	Engines:	2 Turbo Fan
Airframe Total Time:	45376 Hours	Engine Manufacturer:	Rolls-Royce
ELT:	Not installed	Engine Model/Series:	RB 211-535E4
Registered Owner:	MERIDIAN TRUST COMPANY	Rated Power:	40000 lbs
Operator:	AMERICA WEST AIRLINES	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	AWXA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	DEN, 5431 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1953 MST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 25000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	-1° C / -7° C
Precipitation and Obscuration:			
Departure Point:	PHOENIX, AZ (PHX)	Type of Flight Plan Filed:	IFR
Destination:	(DEN)	Type of Clearance:	IFR
Departure Time:	1819 MST	Type of Airspace:	

Airport Information

Airport:	DENVER INTERNATIONAL (DEN)	Runway Surface Type:	
Airport Elevation:	5431 ft	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	6 None	Aircraft Damage:	Minor
Passenger Injuries:	95 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	101 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ARNOLD W SCOTT
Additional Participating Persons:	RAYMOND TOWLES; DENVER, CO
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .