



Aviation Investigation Final Report

Location:	Phoenix, Arizona	Accident Number:	DCA17CA072
Date & Time:	February 11, 2017, 19:50 Local	Registration:	N7822A
Aircraft:	Boeing 737 76N	Aircraft Damage:	None
Defining Event:	Ground handling event	Injuries:	1 Serious, 143 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

On February 11, 2017, about 1950 mountain standard time, Southwest Airlines flight 4152, a Boeing 737-700, N7822A, had a catering agent fall from the airplane while alongside provisioning the airplane. On board were the captain, first officer, three flight attendants and several passengers. The regularly scheduled passenger flight was operating under the provisions of 14 Code of Federal Regulations Part 121 from Phoenix Sky Harbor International Airport (PHX), Phoenix, Arizona, to Sacramento International Airport (SMF), Sacramento, California.

According to Southwest Airlines, while passengers were boarding the airplane at the gate, a catering agent returned to the airplane to provide a box of peanuts. The agent stopped the provisioning truck short of the airplane creating a gap between the truck and the airplane. After entering the airplane to deliver the peanuts, the agent lost situational awareness and stepped backwards, falling through the gap, and suffered a fractured rib.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the catering agent's lack of situational awareness when exiting the airplane that resulted in a serious injury.

Findings

Personnel issues

(general) - Ground crew

Factual Information

History of Flight

Prior to flight	Ground handling event (Defining event)
-----------------	--

Pilot Information

Certificate:	Airline transport; Flight engineer; Flight instructor	Age:	54,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	December 5, 2016
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 24, 2016
Flight Time:	19100 hours (Total, all aircraft), 13275 hours (Total, this make and model), 13150 hours (Pilot In Command, all aircraft), 238 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Co-pilot Information

Certificate:	Airline transport	Age:	48,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	July 19, 2016
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	7537 hours (Total, all aircraft), 3737 hours (Total, this make and model), 1120 hours (Pilot In Command, all aircraft), 190 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Boeing	Registration:	N7822A
Model/Series:	737 76N 76N	Aircraft Category:	Airplane
Year of Manufacture:	2001	Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	32596
Landing Gear Type:	Retractable - Tricycle	Seats:	151
Date/Type of Last Inspection:	February 26, 2017 Continuous airworthiness	Certified Max Gross Wt.:	154500 lbs
Time Since Last Inspection:		Engines:	2 Turbo fan
Airframe Total Time:	47885 Hrs as of last inspection	Engine Manufacturer:	CFM INTL
ELT:	Not installed	Engine Model/Series:	CFM56-7B22
Registered Owner:		Rated Power:	24000 Lbs thrust
Operator:		Operating Certificate(s) Held:	Flag carrier (121)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	PHX,1135 ft msl	Distance from Accident Site:	
Observation Time:	19:51 Local	Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:	Overcast	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	22°C
Precipitation and Obscuration:			
Departure Point:	Phoenix, AZ (PHX)	Type of Flight Plan Filed:	IFR
Destination:	Sacramento, CA (SMF)	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Phoenix Sky Harbor PHX	Runway Surface Type:	
Airport Elevation:	1135 ft msl	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	5 None	Aircraft Damage:	None
Passenger Injuries:	138 None	Aircraft Fire:	None
Ground Injuries:	1 Serious	Aircraft Explosion:	None
Total Injuries:	1 Serious, 143 None	Latitude, Longitude:	33.434165,-112.011665(est)

Administrative Information

Investigator In Charge (IIC):	Lovell, John
Additional Participating Persons:	
Original Publish Date:	May 26, 2017
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=94770

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).