



## National Transportation Safety Board Aviation Incident Factual Report

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<b>Location:</b>	Baltimore, MD	<b>Incident Number:</b>	OPS08IA002B
<b>Date &amp; Time:</b>	12/02/2007, 1922 EST	<b>Registration:</b>	
<b>Aircraft:</b>	Airbus Industrie A320	<b>Aircraft Damage:</b>	None
<b>Defining Event:</b>		<b>Injuries:</b>	131 None
<b>Flight Conducted Under:</b>			

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On December 2, 2007, at approximately 1922 Eastern Standard time (EST), Comair, Inc., flight 5412 (COM5412), N781CA, a Bombardier Canadair Regional Jet, departed runway 15R and over flew America West Airlines flight 83 (AWE 83), N659AW, an Airbus Industrie A-320, that had landed on runway 10, at Baltimore/Washington International Thurgood Marshall Airport (BWI), Baltimore, Maryland. Both aircraft were operating as a 14 Code of Federal Regulations Part 121 flight and both crews had filed instrument flight rules flight plans. There were no injuries to the occupants of either aircraft and neither aircraft was damaged. The incident occurred during night visual flight rules conditions.

About 1919:07, when AWE 83 was approximately six mile final for landing on runway 10, the BWI local controller cleared AWE 83 to land. The pilot of AWE 83 acknowledged the landing clearance.

About 1920:33, as evidenced by BWI radar data and Airport Movement Area Safety System (AMASS) data, AWE 83 was two and one half mile final to runway 10 when the local controller cleared COM5412 for takeoff on runway 15R. At the time of the takeoff clearance, COM5412 was situated on taxiway A about 500 feet south of the departure end of runway 15R. The pilot of COM5412 acknowledged the takeoff clearance.

About 1921:29, the ASDE (airport surface detection equipment) tower display showed the runway 10 red hold bars illuminated for AWE 83 on final approach to runway 10.

About 1921:38, the ASDE tower display showed the runway 15R red hold bars illuminated for COM5412 departing on runway 15R.

About 1921:47, the ASDE tower display alerted with both visual and aural alarms. According to the local controller, from the back of the tower cab, an aural alert announced, "WARNING: AWE83, runways 10, 15R, converging." The AMASS also displayed numerous visual alarms

such as a textual warning box, red hold bars for both runways indicating restricted runway/taxi crossing points, and purple circles around each aircraft as they approached the intersection of runways 10 and 15R. According to the local controller, he had turned his back from the runway operations to ask another controller to adjust the volume on the Domestic Events Network (DEN) line when he heard the AMASS alert. As the local controller turned back towards the local control position, he looked at the ASDE display and saw the circles around the two targets. After recognizing the situation, the local controller said, "Comair, Comair, cancel, cancel or" According to the COM5412 pilot's statement, they were at V1/Vr speed passing taxiway F on runway 15R, when the local controller attempted to instruct the crew to cancel takeoff clearance; however, it was too late to abort the takeoff. COM5412 crossed in front of AWE83, as AWE 83 proceeded through the intersection of runways 10 and 15R. According to the FAA Runway Safety office, COM5412 missed AWE 83 by 400 feet laterally and 400 feet vertically. The FAA Runway Safety Office classified the incident as category "B" event.

About 1922:17, the local controller instructed AWE83 to turn left on runway 4/22, and advised the crew to contact ground control. The pilot of AWE 83 acknowledged.

#### PERSONNEL INFORMATION

The BWI ATCT local controller was appropriately certified and qualified to perform his assigned duties. He received his control tower operator's certificate in 1981 and had been working at as an air traffic controller for 26 years. Certification and experience for the captains and first officers of both aircraft was not requested.

#### METEOROLOGICAL INFORMATION

The BWI special weather observation for 1917EST was: Wind calm, visibility 5 statute miles, light rain and mist, sky conditions ceiling broken at 1,000 feet, overcast 3,000 feet, temperature 39, dew point 39 and altimeter 30.02 inches.

#### WRECKAGE AND IMPACT INFORMATION

There was no damage reported for either aircraft.

#### ADDITIONAL INFORMATION

##### Airport Information

BWI serves airline, air taxi, military, and general aviation aircraft. The annual air activity averages 307,000 flight operations per year. BWI had four runways, 10/28, 15L/33R, 15R/33L and 4/22. Runway 10/28 was 10,502 feet long and 200 feet wide with high intensity runway lights (HIRLS). The runway surface consisted of an asphalt/grooved surface in fair condition. Runway 15R/33L was 9,501 feet long and 150 feet wide with HIRLS. Runway 15R/33L surface consisted of an asphalt/grooved surface in fair condition. The airport field elevation was 146

feet msl. The tower was equipped with an AMASS.

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Airbus Industrie	<b>Registration:</b>	
<b>Model/Series:</b>	A320	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	
<b>Landing Gear Type:</b>	Retractable - Tandem	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	
<b>ELT:</b>		<b>Engine Model/Series:</b>	
<b>Registered Owner:</b>		<b>Rated Power:</b>	
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	AWXA

### Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>	BWI, 146 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	1917 EST	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	5 Miles
<b>Lowest Ceiling:</b>	Broken / 10 ft agl	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	Calm /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.02 inches Hg	<b>Temperature/Dew Point:</b>	4°C / 4°C
<b>Precipitation and Obscuration:</b>	Light - Rain		
<b>Departure Point:</b>	Phoenix, AZ (PHX)	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Baltimore, MD (BWI)	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	1313 MST	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	BALTIMORE-WASHINGTON INTL (BWI)	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	146 ft	<b>Runway Surface Condition:</b>	Wet
<b>Runway Used:</b>	10	<b>IFR Approach:</b>	ILS
<b>Runway Length/Width:</b>	10502 ft / 200 ft	<b>VFR Approach/Landing:</b>	Unknown

## Wreckage and Impact Information

<b>Crew Injuries:</b>	5 None	<b>Aircraft Damage:</b>	None
<b>Passenger Injuries:</b>	126 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	131 None	<b>Latitude, Longitude:</b>	39.175278, -76.668333

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hilton W Hall Jr.
<b>Additional Participating Persons:</b>	
<b>Investigation Docket:</b>	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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .