

Aviation Investigation Final Report

Location: Buena Vista, Colorado Accident Number: DCA12CA062

Date & Time: April 15, 2012, 05:49 UTC Registration: N808AW

Aircraft: AIRBUS INDUSTRIE A319-132 Aircraft Damage: Minor

Defining Event: Turbulence encounter **Injuries:** 2 Serious, 1 Minor, 95

None

Part 121: Air carrier - Scheduled

Analysis

Flight Conducted Under:

On 15 April 2012, at approximately 0549 coordinated universal time, US Airways flight 496, an Airbus A319-132, N808AW, encountered severe mountain wave turbulence at flight level 320 in the vicinity of Buena Vista, Colorado. Of the 98 passengers and crew onboard, two flight attendants received serious injuries and one passenger received minor injuries during the encounter. The flight was operating under the provisions of 14 Code of Federal Regulations Part 121 as a regularly scheduled passenger flight between Phoenix Sky Harbor International Airport (KPHX), Phoenix, Arizona, and Denver International Airport (KDEN), Denver, Colorado.

According to the operator, the captain was the pilot monitoring, and the first officer (FO) was the pilot flying. The flight was cleared to descend from FL390 to 17,000 feet. The seatbelt sign was on during the descent and there were no pilot reports of turbulence in the area. The captain turned on the weather radar and noted no returns present between the airplane and the airport. As the airplane passed through about FL320, the captain noticed the airspeed rapidly increasing. He disconnected the autopilot while simultaneously notifying the FO of the overspeed and began to apply a nose-up input. The FO also began to command a nose-up input at that time and so the captain released his pitch up input. The crew received an overspeed warning and then encountered severe turbulence. The flight crew stated the encounter lasted about 10-15 seconds. After the encounter, both Elevator and Aileron Computers (ELAC) faults were displayed. The FO resumed pilot flying duties while the Captain performed the appropriate actions to reset ELAC 1 and 2, report the encounter to air traffic control and dispatch, and contacted the flight attendants.

The A flight attendant (A-FA) was in the forward jumpseat and the B flight attendant (B-FA) and C flight attendant (C-FA) were in the aft galley sitting in their jumpseats without their seatbelts on. During the turbulence encounter, both aft flight attendants struck the overhead ceiling, panels before landing on the floor. Two passengers who were also not wearing their seatbelts were lifted out of their seats and struck the ceiling panels during the encounter. Oxygen masks in several rows of seats were also released

as a result of the turbulence. Two onboard medical personnel tended to the B-FA and C-FA with the assistance of the A-FA.

The captain declared a medical emergency and arranged for emergency personnel to meet the flight on arrival. At the gate, paramedics transported the two injured flight attendants and one of the injured passengers to the hospital.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: an inadvertent encounter with mountain wave turbulence.

Findings

Environmental issues

Terrain induced turbulence - Effect on personnel

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Factual Information

History of Flight

Enroute-descent Turbulence encounter (Defining event)	
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Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied:
Other Aircraft Rating(s):	Restraint Used:
Instrument Rating(s):	Second Pilot Present:
Instructor Rating(s):	Toxicology Performed:
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	AIRBUS INDUSTRIE	Registration:	N808AW
Model/Series:	A319-132	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	1088
Landing Gear Type:	Tricycle	Seats:	179
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Turbo jet
Airframe Total Time:		Engine Manufacturer:	IAE
ELT:		Engine Model/Series:	V2500SERIES
Registered Owner:	U S BANK NA TRUSTEE	Rated Power:	25000 Lbs thrust
Operator:	US AIRWAYS INC	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	USAA

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Phoenix, AZ (KPHX)	Type of Flight Plan Filed:	IFR
Destination:	Denver, CO	Type of Clearance:	IFR
Departure Time:	04:50 UTC	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	2 Serious, 3 None	Aircraft Damage:	Minor
Passenger Injuries:	1 Minor, 92 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious, 1 Minor, 95 None	Latitude, Longitude:	38.834999,-106.278892(est)

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Administrative Information

 Investigator In Charge (IIC):
 Bower, Daniel

 Additional Participating Persons:
 Additional Publish Date:

 Original Publish Date:
 March 9, 2018

 Last Revision Date:
 Investigation Class:

 Investigation Class:
 Class

 Note:
 This accident report documents the factual circumstances of this accident as described to the NTSB.

 Investigation Docket:
 https://data.ntsb.gov/Docket?ProjectID=83410

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.

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