



National Transportation Safety Board Aviation Accident Final Report

Location:	Atlanta, GA	Accident Number:	ATL03LA051
Date & Time:	03/01/2003, 0630 EST	Registration:	N642AS
Aircraft:	Aerospatiale ATR-72-212	Aircraft Damage:	None
Defining Event:		Injuries:	1 Serious, 15 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

According to the captain, during cruise flight at 17,000 feet the airplane encountered turbulence. The area of turbulence was not forecasted. During the encounter the seat belt sign was illuminated. The cabin attendants informed the captain the passengers were uninjured and a flight attendant had received minor injuries. After landing the paramedics boarded the airplane, and examined the attendants. The flight attendant was transported to the emergency room where it was determined that one flight attendant had a broken femur.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight's encounter with severe turbulence that resulted in serious injury to a flight attendant.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: CRUISE

Findings

1. (C) WEATHER CONDITION - TURBULENCE, CLEAR AIR

Factual Information

On March 1, 2003, at 0630 eastern standard time, an Aerospatiale ATR-72-212, N642AS, registered to and operated by Atlantic Southeast Airlines as Flight 4268, encountered turbulence during cruise flight. Flight 4268 was operated under the provisions of Title 14 CFR Part 121, as a scheduled, domestic passenger flight from Valparaiso, Florida, to William B Hartsfield Atlanta International, Atlanta, Georgia. The flight operated under instrument flight rules with a flight plan filed. The airline transport-rated pilot in command, airline transport-rated first officer, and 12 revenue passengers on board were not injured. One cabin attendant received serious injuries, and the other cabin attendant received minor injuries. The flight continued to Atlanta, Georgia, without further incident. The flight departed Eglin Air Force Base, Florida, at 0450 central daylight time on March 1, 2003.

According to the captain, during cruise flight at 17,000 feet the airplane encountered a jolt of severe turbulence. The autopilot disconnected and there was a 300-foot loss in altitude. According to the flight attendants, during the turbulence encounter they were pinned to the ceiling and dropped to the floor. The captain called to check on the flight attendants status. The flight attendants informed the captain the passengers were uninjured and they had received minor injuries. At the time of the turbulence encounter the seat belt sign was illuminated. The captain radioed for paramedic support after landing. After landing the paramedics boarded the airplane, examined the attendants, and advised them to go to the emergency room for further evaluation. At the emergency room it was determined that one flight attendant had a broken femur in the left ankle and the other was not injured.

The nearest weather reporting facility at the time of the accident was Atlanta International, Georgia. The 0553 surface weather observation was: 400 overcast, visibility 6 statute miles, temperature 7 degrees Celsius, dew point 6 degrees Celsius, wind 70-degrees at 11 knots, and altimeter 30.06 inches. According to the operator, the flight crew received a weather briefing before the flight departed, however there was no weather warning given for severe turbulence.

Pilot Information

Certificate:	Airline Transport	Age:	41, 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):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	02/04/2003
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	5641 hours (Total, all aircraft), 4076 hours (Total, this make and model), 3845 hours (Pilot In Command, all aircraft), 222 hours (Last 90 days, all aircraft), 82 hours (Last 30 days, all aircraft)		

Co-Pilot Information

Certificate:	Airline Transport; Military	Age:	35, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	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--no waivers/lim.	Last FAA Medical Exam:	06/24/2002
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Aerospatiale	Registration:	N642AS
Model/Series:	ATR-72-212	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	395
Landing Gear Type:	Retractable - Tricycle	Seats:	70
Date/Type of Last Inspection:	02/25/2003, Continuous Airworthiness	Certified Max Gross Wt.:	48501 lbs
Time Since Last Inspection:	72 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	19588 Hours at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	Installed, not activated	Engine Model/Series:	PW127
Registered Owner:	ATLANTIC SOUTHEAST AIRLINES INC	Rated Power:	2750 hp
Operator:	ATLANTIC SOUTHEAST AIRLINES INC	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	ASOA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	ATL, 1026 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0553 EST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Thin Overcast	Visibility	6 Miles
Lowest Ceiling:	Overcast / 400 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	7°C / 6°C
Precipitation and Obscuration:			
Departure Point:	VALPARAISO, FL (VPS)	Type of Flight Plan Filed:	IFR
Destination:	ATLANTA, GA (ATL)	Type of Clearance:	IFR
Departure Time:	0450 CST	Type of Airspace:	Class A

Airport Information

Airport:	THE WILLIAM B HARTSFIELD ATLAN (ATL)	Runway Surface Type:	Unknown
Airport Elevation:	1026 ft	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	Unknown
Runway Length/Width:		VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Serious, 3 None	Aircraft Damage:	None
Passenger Injuries:	12 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 15 None	Latitude, Longitude:	33.640278, -84.426944

Administrative Information

Investigator In Charge (IIC):	Eric H Alleyne	Report Date:	06/28/2006
Additional Participating Persons:	Kim Davis; Atlanta FSDO; College Park, GA		
Publish Date:			
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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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](#).