



National Transportation Safety Board Aviation Accident Final Report

Location:	GADSDEN, AL	Accident Number:	ATL90FA095A
Date & Time:	04/09/1990, 1805 CDT	Registration:	N217AS
Aircraft:	EMBRAER EMB-120	Aircraft Damage:	Substantial
Defining Event:		Injuries:	7 None

Flight Conducted Under: Part 135: Air Taxi & Commuter - Scheduled

Analysis

DRG DEP FM RWY 24 WITH AN IFR CLNC, AN ATLANTIC SOUTHEAST AIRLINE FLT (EMBRAER EMB-120, N217AS) ENTERED A LEFT TURN TO A HDG OF EAST & CLIMBED TO AN ASSIGNED ALT OF 5000' MSL. BEFORE RADAR CONTACT WAS ESTABLISHED WITH ATC, THE EMB-120 CONVERGED WITH A CAP CESSNA 172, N99501. THE CESSNA WAS HDG WESTBOUND TOWARD THE SETTING SUN. SUBSEQUENTLY, A HEAD-ON COLLISION OCCURRED ABOUT 2-1/2 MI SOUTH OF THE ARPT. DRG IMPACT, THE RGT HORIZONTAL STABILIZER OF THE EMB-120 SEPD FROM THE ACFT, BUT IT CONTD FLYING TO A SAFE LNDG. THE CESSNA, HOWEVER, ENTERED AN UNCTLD DSCNT & CRASHED. A WITNESS, WHO SAW THE COLLISION, DID NOT NOTE ANY EVASIVE ACTION BY EITHER ACFT BEFORE IMPACT. THE CREW OF THE EMB-120 RPRTD THAT THEY SAW THE CESSNA MOMENTS BEFORE IMPACT. THE CAPT OF THE EMB-120 SAID HE TOOK IMMEDIATE EVASIVE ACTION BY 'PUSHING' THE NOSE DOWN, BUT WAS UNABLE TO AVOID A COLLISION. A FLT ATTENDANT ON THE EMB-120 RECALLED A 'THUMP' BEFORE THE ACFT STARTED A DSCNT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: INADEQUATE VISUAL LOOKOUT BY THE PILOTS OF BOTH AIRCRAFT, WHICH RESULTED IN THEIR FAILURE TO SEE-AND-AVOID ONCOMING TRAFFIC. A FACTOR RELATED TO THE ACCIDENT WAS: THE SUN'S GLARE, WHICH RESTRICTED THE VISION OF THE CESSNA 172 PILOT.

Findings

Occurrence #1: MIDAIR COLLISION

Phase of Operation: CRUISE

Findings

1. (C) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
2. (C) VISUAL LOOKOUT - INADEQUATE - COPILOT/SECOND PILOT
3. (F) LIGHT CONDITION - SUNGLARE
4. (C) VISUAL LOOKOUT - INADEQUATE - PILOT OF OTHER AIRCRAFT
5. (F) VISUAL/AURAL PERCEPTION - PILOT OF OTHER AIRCRAFT

Factual Information

Pilot Information

Certificate:	Airline Transport	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):		Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last Medical Exam:	11/02/1990
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	8352 hours (Total, all aircraft), 903 hours (Total, this make and model), 5894 hours (Pilot In Command, all aircraft), 106 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	EMBRAER	Registration:	N217AS
Model/Series:	EMB-120 EMB-120	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	120011
Landing Gear Type:	Retractable - Tricycle	Seats:	33
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	25353 lbs
Time Since Last Inspection:	0 Hours	Engines:	2 Turbo Prop
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	PW118
Registered Owner:		Rated Power:	1800 hp
Operator:	ATLANTIC SOUTHEAST	Air Carrier Operating Certificate:	Commuter Air Carrier (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	GAD, 569 ft msl	Observation Time:	1754 CDT
Distance from Accident Site:	3 Nautical Miles	Direction from Accident Site:	90°
Lowest Cloud Condition:	Scattered / 25000 ft agl	Temperature/Dew Point:	25° C / 14° C
Lowest Ceiling:	None / 0 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	6 knots, 170°	Visibility (RVR):	0 ft
Altimeter Setting:	30 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GADSDEN, AL (GAD)	Type of Flight Plan Filed:	IFR
Destination:	ATLANTA, GA (ATL)	Type of Clearance:	IFR
Departure Time:	1753 CDT	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	Substantial
Passenger Injuries:	4 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	7 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PHILLIP POWELL	Adopted Date:	03/05/1993
Additional Participating Persons:			
Publish Date:	11/17/2009		
Investigation Docket:	NTSB accident and incident docket 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/ .		

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