



Aviation Investigation Final Report

Location:	BLOUNTVILLE, Tennessee	Accident Number:	ATL84FA031
Date & Time:	October 28, 1983, 21:29 Local	Registration:	N764
Aircraft:	EMBRAER EMB110-P1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	16 Minor
Flight Conducted Under:	Part 135: Air taxi & commuter - Scheduled		

Analysis

THE ACFT WAS LANDED WITH THE LANDING GEAR UP. POST ACCIDENT TESTS OF THE LANDING GEAR EXTENSION SYSTEM SHOWED THAT ALL OPERATIONS WERE NORMAL EXCEPT FOR THE MAIN GEAR DOWN-LOCK INDICATIONS. WHEN THE CREW LOWERED THE GEAR FOR LANDING THE NOSE GEAR AND RIGHT MAIN WERE CONFIRMED DOWN BUT THE CAPTAIN SAID THAT HIS VISUAL INSPECTION FROM THE COCKPIT REVEALED THAT THE LEFT MAIN GEAR DID NOT EXTEND. THERE IS NO INDICATION THAT A FLY-BY FOR A TOWER CHECK WAS DONE OR THAT THE MIG LIGHT IN THE WHEEL WELL WAS USED FOR BETTER NIGHT VISION. THE CREW SAID THE ACFT MANUAL WAS USED FOR ADDITIONAL PROCEDURES TO LOWER THE GEAR. WHEN THE FUEL REMAINING REACHED 100 LBS PER SIDE A DECISION WAS MADE TO LAND WITH THE GEARUP. POST ACCIDENT INSPECTION REVEALED THE LEFT MAIN GEAR LOCK PISTON WAS BINDING THUS PREVENTING A DOWN AND LOCKED INDICATION IN THE COCKPIT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) LANDING GEAR,GEAR INDICATING SYSTEM - BINDING(MECHANICAL)
2. (C) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND
3. (C) ANXIETY/APPREHENSION - PILOT IN COMMAND
4. (F) LANDING GEAR,GEAR INDICATING SYSTEM - FALSE INDICATION
5. (C) JUDGMENT - POOR - PILOT IN COMMAND
6. (C) EMOTIONAL REACTION - PILOT IN COMMAND

Occurrence #2: COMPLETE GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

7. (C) WHEELS UP LANDING - PERFORMED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline transport	Age:	25, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	6000 hours (Total, all aircraft), 2200 hours (Total, this make and model), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	EMBRAER	Registration:	N764
Model/Series:	EMB110-P1 EMB110-P1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	110411
Landing Gear Type:	Retractable - Tricycle	Seats:	21
Date/Type of Last Inspection:	October 27, 1983 Continuous airworthiness	Certified Max Gross Wt.:	12500 lbs
Time Since Last Inspection:	4 Hrs	Engines:	2 Turbo prop
Airframe Total Time:	2937 Hrs	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	PT6A-34
Registered Owner:	BASIL AIRCRAFT SERVICES INC.	Rated Power:	783 Horsepower
Operator:	ATLANTIC SOUTHEAST AIRLINES	Operating Certificate(s) Held:	Commuter air carrier (135)
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	TRI ,1519 ft msl	Distance from Accident Site:	
Observation Time:	21:43 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	9°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ATLANTA , GA (ATL)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	19:55 Local	Type of Airspace:	Class D

Airport Information

Airport:	TRI-CITY TRI	Runway Surface Type:	Asphalt
Airport Elevation:	1519 ft msl	Runway Surface Condition:	Dry
Runway Used:	22	IFR Approach:	None
Runway Length/Width:	6600 ft / 150 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	14 Minor	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	On-ground
Total Injuries:	16 Minor	Latitude, Longitude:	36.530277,-82.319839(est)

Administrative Information

Investigator In Charge (IIC): Drake, John

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=6230>

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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](#).