



Aviation Investigation Final Report

Location:	ATLANTA, Georgia	Accident Number:	ATL89FA189
Date & Time:	August 3, 1989, 09:36 Local	Registration:	N5509K
Aircraft:	CONVAIR 640 (340D)	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 121: Air carrier - Non-scheduled		

Analysis

DURING THE DESCENT TO THE OUTER MARKER FOR A VISUAL APPROACH WITH AN ILS BACKUP TO RUNWAY 26R, THE PILOT IN COMMAND DID NOT DESCEND TO A POINT WHERE A STABILIZED APPROACH TO LANDING COULD BE COMPLETED. THE AIRPLANE REPORTEDLY CROSSED THE OUTER MARKER WITH A FULL SCALE FLY DOWN DEFLECTION ON THE ILS GLIDE SLOPE INDICATOR. THE PILOT REPORTED THAT HE ATTAINED THE GLIDE SLOPE FROM ABOVE WHEN HE WAS ABOUT ONE MILE FROM THE THRESHOLD. THE AIRPLANE WAS FLARED FOR LANDING AT AN EXCESSIVE ALTITUDE AND TOUCHDOWN WAS NOT MADE UNTIL AT LEAST 1,500 FEET DOWN THE RUNWAY. THE AIRPLANE TOUCHED DOWN HARD, BOUNCED AND ON THE SECOND TOUCHDOWN MADE RUNWAY CONTACT WITH ALL THREE GEARS OR POSSIBLY SLIGHTLY NOSE GEAR FIRST. THE NOSE GEAR DRAG LINK FRACTURED, THE NOSE GEAR COLLAPSED AND THE AIRPLANE CAME TO A STOP ON ITS MAIN GEAR AND THE FUSELAGE NOSE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PILOT IN COMMAND FAILED TO PLACE THE AIRPLANE AT A POSITION FROM WHICH A STABILIZED APPROACH TO LANDING COULD BE MADE. HIS PROCEDURE FOR THE RECOVERY FROM THE BOUNCED LANDING WAS INADEQUATE AND THE NOSE GEAR STRUCTURAL STRENGTH WAS EXCEEDED DURING FOLLOWING TOUCHDOWNS.

Findings

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) ALTITUDE - EXCESSIVE - PILOT IN COMMAND
2. (F) AIRSPEED - EXCESSIVE - PILOT IN COMMAND
3. (C) FLARE - INITIATED - PILOT IN COMMAND
4. (C) TOUCHDOWN - IMPROPER - PILOT IN COMMAND
5. (C) REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND
6. (C) ABORTED LANDING - NOT PERFORMED - PILOT IN COMMAND
7. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND

Occurrence #2: NOSE GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

8. (C) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline transport; Commercial	Age:	44, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	June 23, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	7404 hours (Total, all aircraft), 450 hours (Total, this make and model), 105 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CONVAIR	Registration:	N5509K
Model/Series:	640 (340D) 640 (340D)	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	66
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	July 19, 1989 Continuous airworthiness	Certified Max Gross Wt.:	55000 lbs
Time Since Last Inspection:	48 Hrs	Engines:	2 Turbo prop
Airframe Total Time:	42490 Hrs	Engine Manufacturer:	ROLLS-ROYCE
ELT:	Installed, not activated	Engine Model/Series:	DART10MK542-4
Registered Owner:	ZANTOP INT'L AIRLINES, INC	Rated Power:	2750 Horsepower
Operator:	ZANTOP INTERNATIONAL	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	ZIAA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ATL ,1026 ft msl	Distance from Accident Site:	
Observation Time:	08:50 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	4 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 22°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	DETROIT , MI (YIP)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	06:56 Local	Type of Airspace:	Class B;Class D

Airport Information

Airport:	ATLANTA HARTSFIELD ATL	Runway Surface Type:	Concrete
Airport Elevation:	1026 ft msl	Runway Surface Condition:	Dry
Runway Used:	26R	IFR Approach:	ILS
Runway Length/Width:	9000 ft / 150 ft	VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Stiner, Walter
Additional Participating Persons:	RANDY MARTIN; ATLANTA , GA
Original Publish Date:	July 11, 1990
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=7909

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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](#).