



Aviation Investigation Final Report

Location:	CHARLESTON, South Carolina	Accident Number:	ATL90FA135
Date & Time:	June 21, 1990, 22:12 Local	Registration:	N743US
Aircraft:	BOEING 727-281	Aircraft Damage:	None
Defining Event:		Injuries:	2 Serious, 2 Minor, 116 None
Flight Conducted Under:	Part 121: Air carrier - Scheduled		

Analysis

WHILE PASSING 10,000 FEET MSL ON THE DESCENT FOR A NIGHT LANDING, THE NUMBER TWO ENGINE FIRE WARNING LIGHT AND BELL ACTIVATED. FOLLOWING ACCOMPLISHMENT OF ALL CHECKLIST PROCEDURES, THE FIRE WARNING INDICATIONS REMAINED ON. THE CAPTAIN ORDERED AN EMERGENCY EVACUATION ON THE RUNWAY AFTER THE AIRPLANE LANDED. DURING THE EVACUATION, ONE PASSENGER WAS KNOCKED OFF OF THE WING BY AN OVERZEALOUS PASSENGER AND WAS SERIOUSLY INJURED. ANOTHER PASSENGER WITH TWO SMALL CHILDREN REQUESTED ASSISTANCE FROM THE FLIGHT ATTENDANT. WHILE THE FLIGHT ATTENDANT WAS SEEKING HELP, THE PASSENGER PUT ONE CHILD ON THE SLIDE WITHOUT WAITING FOR ASSISTANCE, AND THE CHILD RESISTED. THE CHILD FELL FROM THE SLIDE AND WAS SERIOUSLY INJURED. POST-FLIGHT EXAMINATION OF THE AIRPLANE REVEALED A FAULTY FIRE DETECTION ELEMENT ON THE NUMBER TWO ENGINE, AND NO EVIDENCE OF INFLIGHT FIRE WAS OBSERVED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: IMPROPER UTILIZATION OF THE EMERGENCY EQUIPMENT.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: DESCENT - NORMAL

Findings

1. FIRE WARNING SYSTEM,POWERPLANT - FALSE INDICATION
2. EMERGENCY PROCEDURE - PERFORMED - PILOT IN COMMAND
3. (F) FIRE WARNING SYSTEM,POWERPLANT - SHORTED

Occurrence #2: MISCELLANEOUS/OTHER

Phase of Operation: STANDING - ENGINE(S) NOT OPERATING

Findings

4. (C) EMERGENCY EQUIPMENT - IMPROPER USE OF - PASSENGER

Factual Information

Pilot Information

Certificate:	Airline transport	Age:	53, Male
Airplane Rating(s):	Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	February 5, 1990
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	14950 hours (Total, all aircraft), 3210 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	BOEING	Registration:	N743US
Model/Series:	727-281 727-281	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	20285
Landing Gear Type:	Retractable - Tricycle	Seats:	160
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	173000 lbs
Time Since Last Inspection:	0 Hrs	Engines:	3 Turbo jet
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	JT8D-9A
Registered Owner:	USAIR	Rated Power:	14500 Lbs thrust
Operator:	USAIR	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	USAA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/bright
Observation Facility, Elevation:	CHS ,45 ft msl	Distance from Accident Site:	
Observation Time:	21:54 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	6 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CHARLOTTE , NC (CLT)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	21:09 Local	Type of Airspace:	

Airport Information

Airport:	CHARLESTON INTERNATIONAL CHS	Runway Surface Type:	Asphalt
Airport Elevation:	45 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	VOR/DME
Runway Length/Width:	7000 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	7 None	Aircraft Damage:	None
Passenger Injuries:	2 Serious, 2 Minor, 109 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious, 2 Minor, 116 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): Hicks, Ralph

Additional Participating Persons:

Original Publish Date: November 9, 1992

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=8137>

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](#).