

# **Aviation Investigation Final Report**

Location:	BOSTON, Massachu	setts	Incident Number:	NYC86IA093
Date & Time:	March 26, 1986, 23:4	41 Local	<b>Registration:</b>	N52311
Aircraft:	BOEING	727-231	Aircraft Damage:	None
Defining Event:			Injuries:	2 Minor, 94 None
Flight Conducted Under:	Part 121: Air carrier	- Scheduled		

## Analysis

TWO OF 3 REQD FLT ATTENDANTS (F/A'S) WERE DISTRIBUTING PASSENGER (PAX) COATS AS THE ACFT WAS BEING TAXIED AFTER LNDG. SMOKE FM AN OVERHEATED AIR COND (A/C) PACK BGN ENTERING THE CABIN & THE F/A'S RETURNED TO THEIR DUTY STATIONS. THE FLT CREW STOPPED THE ACFT AT THE GATE & SHUT DWN THE ENGS, BUT LEFT THE APU RUNNING TO PROVIDE ELECTRICITY FOR LIGHTING. THEF/A'S OPENED THE L FWD DOOR & GND PSNL OPENED THE REAR STAIR DOOR TO DEPLANE THE PAX. THE CAPT MADE AN ANNOUNCEMENT TO KEEP THE PAX CALM, BUT SMOKE BCM DENSE & PAX OPENED THE EMERG EXITS OVR THE WINGS & BGN EXITING FM THEM. TWO PAX RCVD MINOR INJURIES WHILE EXITING OVR THE WINGS. AN INVESTIGATION REVEALED THE ACFT HAD BEEN DISPATCHED WITH THE R PACK COOL-ING FAN INOP AS AUTHORIZED BY THE MIN EQUIP LIST (MEL). DRG FLT, A RADIO INTERFERENCE FILTER IN THE A/C SYS FAILED WHICHALLOWED THE FWD PACK SHUT-OFF VALVE TO OPEN, BUT NOT CLOSE. THIS PERMITTED APU AIR TO RUN THE AFFECTED PACK EVEN THO THESWITCH WAS OFF & A CIRCUIT BRKR WAS PULLED. WITH THE ENGS SHUT DOWN & THE R COOLING FAN INOP, THE SYS OVERHEATED.

## **Probable Cause and Findings**

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

#### **Findings**

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: TAXI - FROM LANDING

Findings

- 1. (C) AIR COND/HEATING/PRESSURIZATION, CABIN TEMP CONTROL FAILURE, PARTIAL 2. (C) AIR COND/HEATING/PRESSURIZATION OVERTEMPERATURE
- 3. FUSELAGE, CABIN SMOKE

# **Factual Information**

#### **Pilot Information**

Certificate:	Airline transport	Age:	48,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):	None	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:	7792 hours (Total, all aircraft), 702 hours (Total, this make and model), 4 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	BOEING	Registration:	N52311
Model/Series:	727-231 727-231	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	19830
Landing Gear Type:	Retractable - Tricycle	Seats:	134
Date/Type of Last Inspection:	AAIP	Certified Max Gross Wt.:	142000 lbs
Time Since Last Inspection:	271 Hrs	Engines:	3 Turbo fan
Airframe Total Time:	44246 Hrs	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	JT8D-9A
Registered Owner:	FIRST SECURITY BANK UTAH	Rated Power:	
Operator:	TRANS WORLD AIRLINES	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/bright
Observation Facility, Elevation:	BOS ,20 ft msl	Distance from Accident Site:	
Observation Time:	23:51 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 25000 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	12°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ST LOUIS , MO (STL )	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	21:00 Local	Type of Airspace:	Class E

## **Airport Information**

Airport:	LOGAN INTL BOS	Runway Surface Type:	Asphalt
Airport Elevation:	20 ft msl	Runway Surface Condition:	Dry
Runway Used:	22L	IFR Approach:	ILS
Runway Length/Width:	10005 ft / 150 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	6 None	Aircraft Damage:	None
Passenger Injuries:	2 Minor, 88 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor, 94 None	Latitude, Longitude:	

#### **Administrative Information**

Investigator In Charge (IIC):	Twine, Chauncey	
Additional Participating Persons:	THOMAS FULLER;	
Original Publish Date:		
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=30236	

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.