



# National Transportation Safety Board Aviation Incident Final Report

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<b>Location:</b>	HOUSTON, TX	<b>Incident Number:</b>	FTW881A037
<b>Date &amp; Time:</b>	12/03/1987, 1234 CST	<b>Registration:</b>	N571PE
<b>Aircraft:</b>	BOEING 727-243	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>		<b>Injuries:</b>	87 None

**Flight Conducted Under:** Part 121: Air Carrier - Scheduled

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## Analysis

DURING THE APPROACH TO LANDING THE NUMBER SIX LEADING EDGE SLAT ASSEMBLY FAILED. THE INBOARD SECTION OF THE SLAT HUNG DOWN AND BENT AFT. THE PILOT LANDED THE ACFT WITHOUT FURTHER INCIDENT. METALLURGICAL ANALYSIS OF COMPONENTS REVEALED THAT A SLAT TRACK ROLLER BEARING CONTAINED EVIDENCE OF CORROSION AND SPALLING. ADDITIONALLY, THE SLAT TRACK BEARING BOLT THAT HAD BEEN INSTALLED THROUGH THE ABOVE MENTIONED BEARING HAD HEAVY CIRCUMFERENTIAL GOUGES CONTAINED IN THE SURFACE OF A CROSS-DRILLED HOLE AT THE AREAS OF FATIGUE INITIATION. THERE WAS ALSO EVIDENCE OF TEARING, TYPICAL OF DAMAGE PRODUCED DURING DRILLING WITH A DULL DRILL BIT. THE AIRPLANE HAD COMPLETED A MAJOR STRUCTURAL MAINTENANCE CHECK 48 FLIGHT HOURS AND 28 CYCLES PRIOR TO THE INCIDENT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be: IMPROPER DRILLING OF THE CROSS HOLE IN THE SLAT TRACK BEARING BOLT, WHICH LED TO ITS FAILURE FROM FATIGUE CRACKING.

## Findings

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Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: APPROACH

### Findings

1. (F) FLIGHT CONTROL,SLAT ATTACHMENT - CORRODED
2. (F) FLIGHT CONTROL,SLAT ATTACHMENT - FATIGUE
3. (C) FLIGHT CONTROL,SLAT - FAILURE,TOTAL
4. (C) MAINTENANCE,INSTALLATION - IMPROPER - MANUFACTURER
5. (C) INADEQUATE QUALITY CONTROL - MANUFACTURER

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Commercial	<b>Age:</b>	34, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	10/13/1987
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	6500 hours (Total, all aircraft), 2000 hours (Total, this make and model), 200 hours (Last 90 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BOEING	<b>Registration:</b>	N571PE
<b>Model/Series:</b>	727-243 727-243	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	21264
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	143
<b>Date/Type of Last Inspection:</b>	11/27/1987, AAIP	<b>Certified Max Gross Wt.:</b>	170000 lbs
<b>Time Since Last Inspection:</b>	48 Hours	<b>Engines:</b>	3 Turbo Fan
<b>Airframe Total Time:</b>	24892 Hours	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	JT8D-9A
<b>Registered Owner:</b>	PEOPLE EXPRESS AIRLINES, INC.	<b>Rated Power:</b>	14500 lbs
<b>Operator:</b>	PEOPLE EXPRESS AIRLINES, INC.	<b>Operating Certificate(s) Held:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>	CONTINENTAL AIRLINES	<b>Operator Designator Code:</b>	CALA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	IAH, 98 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1248 CST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 3000 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24° C / 16° C
Precipitation and Obscuration:			
Departure Point:	EL PASO, TX (ELP)	Type of Flight Plan Filed:	IFR
Destination:	HOUSTON, TX (IAH)	Type of Clearance:	IFR
Departure Time:	1000 MST	Type of Airspace:	Class B

## Airport Information

Airport:	HOUSTON INTERCONTINENTAL (IAH)	Runway Surface Type:	Concrete
Airport Elevation:	98 ft	Runway Surface Condition:	Dry
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	12001 ft / 150 ft	VFR Approach/Landing:	Full Stop

## Wreckage and Impact Information

Crew Injuries:	7 None	Aircraft Damage:	Minor
Passenger Injuries:	80 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	87 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	TOMMY D MCFALL	Report Date:	11/28/1989
Additional Participating Persons:	CHRIS CLARK; HOUSTON, TX		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets 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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).