



# Aviation Investigation Final Report

<b>Location:</b>	BUFFALO, New York	<b>Incident Number:</b>	NYC84IA271
<b>Date &amp; Time:</b>	July 26, 1984, 16:58 Local	<b>Registration:</b>	N518PE
<b>Aircraft:</b>	BOEING 727-232	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>		<b>Injuries:</b>	105 None
<b>Flight Conducted Under:</b>	Part 121: Air carrier - Scheduled		

## Analysis

DURING THE DEPARTURE FROM NEWARK, NJ, THE AIRCREW NOTED A VIBRATION WHICH CEASED AFTER THE GEAR WAS RETRACTED. THE CREW SUSPECTED THAT A TIRE WAS OUT-OF-ROUND OR A GEAR DOOR WAS VIBRATING & CONTINUED THE FLT. DURING THE APCH TO BUFFALO, NY, THE VIBRATION OCCURRED AGAIN WHEN THE LANDING GEAR WAS EXTENDED, BUT CEASED ON FINAL APCH. THE APCH & LANDING WERE CONTINUED WITHOUT FURTHER INCIDENT. AFTER LANDING, AN EXAM OF THE ACFT, GEAR & GEAR DOORS REVEALED NO REASON FOR THE VIBRATION. HOWEVER, DURING THE FLT, A PIECE OF THE LEFT TRAILING EDGE FLAP HAD SEPARATED. IT HAD SEPARATED ON FINAL APCH & HAD HIT A PARKED CAR CAUSING MINOR DAMAGE. THERE WAS EVIDENCE OF IMPROPER SURFACE PREPARATION & BONDING DURING A PREVIOUS REPAIR OF THE FLAP.

## 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: APPROACH - VFR PATTERN - FINAL APPROACH

#### Findings

1. (C) FLIGHT CONTROL, FLAP - FAILURE, PARTIAL

2. (C) MAINTENANCE - IMPROPER - OTHER MAINTENANCE PERSONNEL
3. FLIGHT CONTROL,FLAP - VIBRATION
4. (C) FLIGHT CONTROL,FLAP - FAILURE,TOTAL
5. FLIGHT CONTROL,FLAP - SEPARATION

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	33, Male
<b>Airplane Rating(s):</b>	Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<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>	May 1, 1984
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	4500 hours (Total, all aircraft), 100 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BOEING	<b>Registration:</b>	N518PE
<b>Model/Series:</b>	727-232 727-232	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Transport	<b>Serial Number:</b>	20641
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	154
<b>Date/Type of Last Inspection:</b>	April 25, 1984 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	210000 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	3 Turbo fan
<b>Airframe Total Time:</b>	30025 Hrs	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	JT8D-15
<b>Registered Owner:</b>	PEOPLE EXPRESS AIRLINES	<b>Rated Power:</b>	13750 Lbs thrust
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	PEXA

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	BUF	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	
<b>Lowest Ceiling:</b>	Broken / 5000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	340°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	24°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	NEWARK (EWR)	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	BUFFALO (BUF)	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	16:07 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	7 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	98 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	105 None	<b>Latitude, Longitude:</b>	42.930019,-78.750518(est)

## Administrative Information

**Investigator In Charge (IIC):** Taylor, Vernon

**Additional Participating Persons:** GILBERT J RUGULO; TETERBORO , NJ  
LAWRENCE LEE; TETERBORO , NJ  
THOMAS A WELMAN; TETERBORO , NJ

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=35446>

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