



National Transportation Safety Board Aviation Accident Final Report

Location:	TULSA, OK	Accident Number:	MIA87FA248
Date & Time:	09/15/1987, 2036 CDT	Registration:	N8857E
Aircraft:	BOEING 727	Aircraft Damage:	Substantial
Defining Event:		Injuries:	62 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

THE CREW OF THE BOEING 727 AIRCRAFT ON A DOMESTIC PASSENGER FLIGHT INITIATED AN APPROACH TO A RUNWAY WITH A KNOWN CROSSWIND AND TAILWIND COMPONENT. ON FINAL APPROACH THE TOWER CONTROLLERS RE-STATED THE WIND AND ISSUED A WINDSHEAR WARNING. ON SHORT FINAL AT FLARE THE AIRCRAFT EXPERIENCED GUSTS AND TURBULENCE RESULTING IN A HARD LANDING.

Probable Cause and Findings

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

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - GUSTS
 2. (F) WEATHER CONDITION - THUNDERSTORM, OUTFLOW
 3. (F) WEATHER CONDITION - TURBULENCE
 4. (F) WEATHER CONDITION - WINDSHEAR
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Occurrence #2: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. (C) HAZARDOUS WEATHER ADVISORY - INATTENTIVE - PILOT IN COMMAND
6. (C) WIND INFORMATION - DISREGARDED - PILOT IN COMMAND
7. (F) AIRSPEED - INADEQUATE - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Airline Transport	Age:	56, Male
Airplane Rating(s):	Multi-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	16102 hours (Total, all aircraft), 9532 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	BOEING	Registration:	N8857E
Model/Series:	727 727	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	20619
Landing Gear Type:	Retractable - Tricycle	Seats:	134
Date/Type of Last Inspection:	04/10/1987, Continuous Airworthiness	Certified Max Gross Wt.:	142000 lbs
Time Since Last Inspection:		Engines:	3 Turbo Fan
Airframe Total Time:	45757 Hours	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	JT8D
Registered Owner:	EASTERN AIRLINES INC.	Rated Power:	14500 lbs
Operator:	EASTERN AIRLINES, INC.	Operating Certificate(s) Held:	Flag carrier (121)
Operator Does Business As:		Operator Designator Code:	EALA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	TUL, 676 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	2040 CDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	4 Miles
Lowest Ceiling:	Overcast / 3000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	22 knots / 30 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	KANSAS CITY, KS (MKC)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	1950 CDT	Type of Airspace:	

Airport Information

Airport:	TULSA INTL (TUL)	Runway Surface Type:	Concrete
Airport Elevation:	676 ft	Runway Surface Condition:	Wet
Runway Used:	35R	IFR Approach:	ILS
Runway Length/Width:	10000 ft / 200 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	7 None	Aircraft Damage:	Substantial
Passenger Injuries:	55 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	62 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ANDREW A ALSTON	Report Date:	12/27/1988
Additional Participating Persons:	FRANK ALEXANDER; ALTANTA, GA WAYNE HOWLETT; MIAMI, FL RICHARD BARBIERE; MIAMI, FL		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).