



# National Transportation Safety Board

## Aviation Incident Data Summary

<b>Location:</b>	HOUSTON, TX	<b>Incident Number:</b>	FTW951A083
<b>Date &amp; Time:</b>	01/01/1995, 1150 CST	<b>Registration:</b>	N326SW
<b>Aircraft:</b>	BOEING 737-3A4	<b>Injuries:</b>	66 None
<b>Flight Conducted Under:</b>	Part 121: Air Carrier - Scheduled		

### Analysis

DURING DESCENT FOR THE LANDING APPROACH THE PILOT EXPERIENCED UNCOMMANDED ROLL DIVERGENCE. THE AIRCRAFT WAS AT APPROXIMATELY 240 KNOTS, CLEAN CONDITION, AND POWER WAS REDUCED AT THE TIME OF THE OCCURRENCE. THE AIRCRAFT WAS FOLLOWING AN MD-80 WHEN THE EVENT OCCURRED. THE FIRST PILOT WAS AT THE CONTROLS WHEN THE UNCOMMANDED ROLLS OCCURRED, HOWEVER, THE CAPTAIN ASSUMED CONTROL EARLY DURING THE SEQUENCE. IT WAS NOTED THAT THE AUTOPILOT ALTITUDE HOLD WAS ENGAGED. THE INITIAL DIVERGENCE WAS A 20 DEGREE RIGHT ROLL. AS THE RIGHT ROLL WAS DEVELOPING THE PILOT APPLIED A LEFT CORRECTION, AND THE AIRCRAFT ROLLED 30 DEGREES LEFT. THE PILOT THEN APPLIED RIGHT RUDDER WHICH RESULTED IN THE WINGS COMING TO THE LEVEL ATTITUDE. AN EXAMINATION OF THE FLIGHT CONTROL SYSTEM FAILED TO REVEAL ANY ANOMALIES.

### Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be: ENCOUNTER WITH WAKE TURBULENCE.

### Findings

Occurrence #1: VORTEX TURBULENCE ENCOUNTERED  
Phase of Operation: APPROACH

#### Findings

- (C) WAKE TURBULENCE - ENCOUNTERED

### Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor; Commercial	<b>Age:</b>	37
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	Glider	<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
<b>Flight Time:</b>	12000 hours (Total, all aircraft), 8000 hours (Total, this make and model), 7500 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BOEING	<b>Registration:</b>	N326SW
<b>Model/Series:</b>	737-3A4 737-3A4	<b>Engines:</b>	2 Turbo Fan
<b>Operator:</b>	SOUTHWEST AIRLINES CO.	<b>Engine Manufacturer:</b>	GE
<b>Operating Certificate(s) Held:</b>	Flag carrier (121)	<b>Engine Model/Series:</b>	CFM56-3
<b>Flight Conducted Under:</b>	Part 121: Air Carrier - Scheduled		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	, 0 ft msl	<b>Weather Information Source:</b>	Unknown
<b>Lowest Ceiling:</b>	Unknown / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	/ ,
<b>Temperature:</b>		<b>Visibility</b>	0 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	DALLAS, TX (DAL)	<b>Destination:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	5 None	<b>Aircraft Damage:</b>	None
<b>Passenger Injuries:</b>	61 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

<b>Investigator In Charge (IIC):</b>	MATTHEW ELLIS,	<b>Adopted Date:</b>	08/31/1995
<b>Investigation Docket:</b>	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> .		

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.