



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	FAIRFIELD, CA	<b>Accident Number:</b>	LAX88FA020
<b>Date &amp; Time:</b>	10/23/1987, 0423 PDT	<b>Registration:</b>	N828FE
<b>Aircraft:</b>	CESSNA 208A	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled		

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## Analysis

WHILE CRUISING ON A SCHEDULED CARGO FLIGHT IN IMC THE PILOT ENCOUNTERED MODERATE TO SEVERE TURBULENCE NEAR AN AREA WHERE WEATHER CELLS COULD HAVE BEEN OBSERVED ON THE AIRCRAFT'S RADAR. THE PILOT REVERSED COURSE, DECLARED AN EMERGENCY AND LOST CONTROL OF THE AIRCRAFT. THE AIRCRAFT ENTERED AN UNCONTROLLED DESCENT, COLLIDED WITH TERRAIN AND WAS DESTROYED. THE RECENTLY HIRED PILOT HAD COMPLETED THE FAA APPROVED GROUND AND FLIGHT TRAINING PROGRAM IN THE AIRCRAFT. DURING THE PILOT'S RECENT TRAINING, NEITHER THE FAA NOR THE OPERATOR REQUIRED THE PILOT TO DEMONSTRATE PROFICIENCY IN UNUSUAL ATTITUDE RECOVERIES OR HAVE KNOWLEDGE IN THE OPERATION OF THE AIRCRAFT'S WEATHER RADAR. COMPANY EMPLOYEES, WHICH INCLUDED THE PILOT'S HUSBAND, STATED THAT THE PILOT HAD NO PREVIOUS EXPERIENCE WITH WEATHER RADAR AND DID NOT UNDERSTAND THE WEATHER RADAR INSTALLED IN THIS AIRCRAFT. THEY FURTHER STATED THAT THE PILOT APPEARED TO BE TIRED.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: PILOT'S ENCOUNTER WITH SEVERE TURBULENCE WHICH PRECIPITATED A LOSS OF AIRCRAFT CONTROL.

## Findings

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Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: CRUISE - NORMAL

### Findings

1. LIGHT CONDITION - DARK NIGHT
  2. (F) WEATHER CONDITION - TURBULENCE IN CLOUDS
  3. (F) WEATHER RADAR - NOT UNDERSTOOD - PILOT IN COMMAND
  4. (F) INADEQUATE INITIAL TRAINING - COMPANY/OPERATOR MANAGEMENT
  5. (F) INADEQUATE INITIAL TRAINING - FAA(PRINCIPAL OPERATIONS INSPECTOR)
  6. (C) FLIGHT INTO KNOWN ADVERSE WEATHER - CONTINUED - PILOT IN COMMAND
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

### Findings

7. (C) SPIRAL - UNCONTROLLED - PILOT IN COMMAND
  8. (F) SPATIAL DISORIENTATION - PILOT IN COMMAND
  9. (F) FATIGUE(LACK OF SLEEP) - PILOT IN COMMAND
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor	<b>Age:</b>	40, Female
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<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>	No
<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	10/01/1986
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	10495 hours (Total, all aircraft), 642 hours (Total, this make and model), 10291 hours (Pilot In Command, all aircraft), 156 hours (Last 90 days, all aircraft), 23 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N828FE
<b>Model/Series:</b>	208A 208A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	20800073
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	10/12/1987, AAIP	<b>Certified Max Gross Wt.:</b>	8000 lbs
<b>Time Since Last Inspection:</b>	19 Hours	<b>Engines:</b>	1 Turbo Prop
<b>Airframe Total Time:</b>	1721 Hours	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	PT6A-114
<b>Registered Owner:</b>	FEDERAL EXPRESS CORP.	<b>Rated Power:</b>	600 hp
<b>Operator:</b>	UNION FLIGHTS	<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	SUU, 62 ft msl	Distance from Accident Site:	4 Nautical Miles
Observation Time:	0355 PDT	Direction from Accident Site:	115°
Lowest Cloud Condition:	Scattered / 1000 ft agl	Visibility	4 Miles
Lowest Ceiling:	Overcast / 7000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	16° C / 14° C
Precipitation and Obscuration:			
Departure Point:	OAKLAND, CA (OAK)	Type of Flight Plan Filed:	IFR
Destination:	RENO, NV (RNO)	Type of Clearance:	IFR
Departure Time:	0358 PDT	Type of Airspace:	Class D; Class E

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	WAYNE R POLLACK	Report Date:	11/15/1989
Additional Participating Persons:	RICHARD NEILSON; SACRAMENTO, CA TERESA O'LEARY; WICHITA, KS		
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](#).