
Turbulence on descent involving a Boeing 737-790, near Anchorage, Alaska, on November 13, 2000

Micro-summary: Turbulence on descent injures flight attendants.

Event Date: 2000-11-13 at 1212 AST


Investigative Body: National Transportation Safety Board (NTSB), USA


Investigative Body's Web Site: <http://www.nts.gov/>


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|--|--|---------------------------------|----------------------------------|--------------------------------------|------------------|
|  | | NTSB ID: ANC01LA018 | | Aircraft Registration Number: N611AS | |
| | | Occurrence Date: 11/13/2000 | | Most Critical Injury: Serious | |
| | | Occurrence Type: Accident | | Investigated By: NTSB | |
| Location/Time | | | | | |
| Nearest City/Place ANCHORAGE | | State AK | Zip Code 99515 | Local Time 1212 | Time Zone AST |
| Airport Proximity: Unknown | | Distance From Landing Facility: | | Direction From Airport: | |
| Aircraft Information Summary | | | | | |
| Aircraft Manufacturer Boeing | | Model/Series 737-790 | | Type of Aircraft Airplane | |
| Sightseeing Flight: No | | | Air Medical Transport Flight: No | | |
| Narrative | | | | | |
| <p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>On November 13, 2000, about 1212 Alaska standard time, a Boeing 737-790 airplane, N611AS, encountered moderate turbulence during initial approach to the Ted Stevens International Airport, Anchorage, Alaska. The flight was conducted under Title 14, CFR Part 121, as a scheduled domestic passenger flight, operated by Alaska Airlines, Inc., as Flight 135. There were no injuries to the two pilots, 95 passengers, or two of the three flight attendants aboard. The remaining flight attendant sustained serious injuries. Visual meteorological conditions prevailed, and an instrument flight plan had been filed for the flight from Chicago, Illinois.</p> <p>During a telephone conversation with the National Transportation Safety Board investigator-in-charge on November 14, the captain reported that prior to starting the descent, he received reports of moderate turbulence in the area of the Ted Stevens International Airport. He said that he instructed the cabin attendants to secure the cabin early in anticipation of turbulence during the approach. While descending through 13,000 feet the captain made an announcement over the airplane's public address system, stating "Flight attendants, if you have not already done so, please be seated now." The captain said that in the process of making the announcement, he emphasized the term now. During the initial descent the captain characterized the turbulence as "basically smooth" until reaching about 11,000 feet. He added that as he turned the aircraft to an assigned heading of 240 degrees, and while descending through 11,000 feet, the airplane experienced a substantial vertical drop. The captain said that during the rest of the descent, the turbulence continued to be moderate until descending through 4,000 feet, where it dissipated. The flight continued to the Ted Stevens International Airport, and landed without further incident. He added that he was unaware that anyone had been injured until after landing, when one of the other flight attendants informed him of the aft flight attendant's injuries.</p> <p>During an interview with the National Transportation Safety Board investigator-in-charge on November 16, the injured flight attendant related that before the flight crew initiated the descent, the attendants were asked to ready the cabin early in anticipation of turbulence. She said that after storing all of the service equipment, the captain made the announcement over the public address system, reminding the flight attendants be seated, "now." She said that as she walked to the back of the airplane, and just before she was to be seated, she noticed that a few remaining service carts located in the aft galley were not locked down. She stated that as she locked down one of the last remaining service carts, "the floor just fell out from under my feet, my head hit the ceiling, and I landed back on the floor, on my right leg."</p> <p>The flight attendant sustained a broken right ankle.</p> | | | | | |
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|  National Transportation Safety Board FACTUAL REPORT AVIATION | | NTSB ID: ANC01LA018 | | | |
| | | Occurrence Date: 11/13/2000 | | | |
| | | Occurrence Type: Accident | | | |
| Landing Facility/Approach Information | | | | | |
| Airport Name | Airport ID: | Airport Elevation Ft. MSL | Runway Used 0 | Runway Length | Runway Width |
| Runway Surface Type: | | | | | |
| Runway Surface Condition: | | | | | |
| Type Instrument Approach: NONE | | | | | |
| VFR Approach/Landing: None | | | | | |
| Aircraft Information | | | | | |
| Aircraft Manufacturer Boeing | | Model/Series 737-790 | | Serial Number 29753 | |
| Airworthiness Certificate(s): Normal | | | | | |
| Landing Gear Type: Retractable - Tricycle | | | | | |
| Homebuilt Aircraft? No | Number of Seats: 129 | Certified Max Gross Wt. | 155000 LBS | Number of Engines: 2 | |
| Engine Type: Turbo Fan | Engine Manufacturer: Cfm | Model/Series: 56 SERIES | Rated Power: 22000 LBS | | |
| - Aircraft Inspection Information | | | | | |
| Type of Last Inspection Unknown | Date of Last Inspection | Time Since Last Inspection Hours | Airframe Total Time Hours | | |
| - Emergency Locator Transmitter (ELT) Information | | | | | |
| ELT Installed? Yes | ELT Operated? No | ELT Aided in Locating Accident Site? | | | |
| Owner/Operator Information | | | | | |
| Registered Aircraft Owner ALASKA AIR GROUP | | Street Address P.O. BOX 68900 / CODE: SEAOZ | | | |
| | | City SEATTLE | State WA | Zip Code 98168 | |
| Operator of Aircraft Same as Reg'd Aircraft Owner | | Street Address Same as Reg'd Aircraft Owner | | | |
| | | City | State | Zip Code | |
| Operator Does Business As: ALASKA AIRLINES | | | Operator Designator Code: ASAA | | |
| - Type of U.S. Certificate(s) Held: | | | | | |
| Air Carrier Operating Certificate(s): Flag Carrier/Domestic | | | | | |
| Operating Certificate: | | | Operator Certificate: | | |
| Regulation Flight Conducted Under: Part 121: Air Carrier | | | | | |
| Type of Flight Operation Conducted: Scheduled; Domestic; Passenger Only | | | | | |
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|  <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p> | NTSB ID: ANC01LA018 |
| | Occurrence Date: 11/13/2000 |
| | Occurrence Type: Accident |

First Pilot Information

| | | | | |
|-----------------|-----------------|------------------|---------------|-----------|
| Name On File | City On File | State On File | Date of Birth | Age 50 |
|-----------------|-----------------|------------------|---------------|-----------|

| | | | |
|--------|---------------------|--------------------------------------|---------------------|
| Sex: M | Seat Occupied: Left | Principal Profession: Civilian Pilot | Certificate Number: |
|--------|---------------------|--------------------------------------|---------------------|

Certificate(s): Airline Transport; Flight Engineer

Airplane Rating(s): Multi-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

| | |
|---|---------------------------------|
| Type Rating/Endorsement for Accident/Incident Aircraft? Yes | Current Biennial Flight Review? |
|---|---------------------------------|

| | | |
|------------------------|-------------------------------|------------------------------------|
| Medical Cert.: Class 1 | Medical Cert. Status: Unknown | Date of Last Medical Exam: 09/2000 |
|------------------------|-------------------------------|------------------------------------|

| - Flight Time Matrix | All A/C | This Make and Model | Airplane Single Engine | Airplane Multi-Engine | Night | Instrument | | Rotorcraft | Glider | Lighter Than Air |
|-----------------------|---------|---------------------|------------------------|-----------------------|-------|------------|-----------|------------|--------|------------------|
| | | | | | | Actual | Simulated | | | |
| Total Time | 13059 | | | | | 4000 | 500 | | | |
| Pilot In Command(PIC) | | | | | | | | | | |
| Instructor | | | | | | | | | | |
| Last 90 Days | | | | | | | | | | |
| Last 30 Days | | | | | | | | | | |
| Last 24 Hours | 6 | 6 | 6 | 6 | | | | | | |

| | | | |
|--------------------|----------------------------|--------------------------|-------------------|
| Seatbelt Used? Yes | Shoulder Harness Used? Yes | Toxicology Performed? No | Second Pilot? Yes |
|--------------------|----------------------------|--------------------------|-------------------|

Flight Plan/Itinerary

| | |
|--------------------------------|--|
| Type of Flight Plan Filed: IFR | |
|--------------------------------|--|

| | | | | |
|----------------------------|-------------|---------------------------|------------------------|------------------|
| Departure Point CHICAGO | State IL | Airport Identifier ORD | Departure Time 0903 | Time Zone CST |
|----------------------------|-------------|---------------------------|------------------------|------------------|

| | | | |
|--------------------------|-------------|---------------------------|--|
| Destination ANCHORAGE | State AK | Airport Identifier ANC | |
|--------------------------|-------------|---------------------------|--|


Type of Clearance: IFR

Type of Airspace: Class E

Weather Information

Source of Briefing:
Company; National Weather Service

Method of Briefing:

| | |
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| | Occurrence Date: 11/13/2000 |
| | Occurrence Type: Accident |

Weather Information

| WOF ID | Observation Time | Time Zone | WOF Elevation | WOF Distance From Accident Site | Direction From Accident Site |
|--------|------------------|-----------|---------------|---------------------------------|------------------------------|
| 0000 | | | 0 Ft. MSL | 0 NM | 0 Deg. Mag. |

Sky/Lowest Cloud Condition: **Scattered** 10000 Ft. AGL Condition of Light: **Day**

Lowest Ceiling: **Overcast** 14000 Ft. AGL Visibility: **10** SM Altimeter: **29.00** "Hg

Temperature: **-2 °C** Dew Point: **-4 °C** Wind Direction: **340** Density Altitude: **Ft.**

Wind Speed: **7** Gusts: Weather Conditions at Accident Site: **Visual Conditions**

Visibility (RVR): **0** Ft. Visibility (RVV) **0** SM Intensity of Precipitation: **Unknown**

Restrictions to Visibility: **None**

Type of Precipitation: **None**

Accident Information

Aircraft Damage: **None** Aircraft Fire: **None** Aircraft Explosion: **None**

Classification: **U.S. Registered/U.S. Soil**

| - Injury Summary Matrix | Fatal | Serious | Minor | None | TOTAL |
|-------------------------|-------|---------|-------|------|-------|
| First Pilot | | | | 1 | 1 |
| Second Pilot | | | | 1 | 1 |
| Student Pilot | | | | | |
| Flight Instructor | | | | | |
| Check Pilot | | | | | |
| Flight Engineer | | | | | |
| Cabin Attendants | | 1 | | 2 | 3 |
| Other Crew | | | | | |
| Passengers | | | | 95 | 95 |
| - TOTAL ABOARD - | | 1 | | 99 | 100 |
| Other Ground | 0 | 0 | 0 | | 0 |
| - GRAND TOTAL - | 0 | 1 | 0 | 99 | 100 |

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: ANC01LA018

Occurrence Date: 11/13/2000

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

CLINTON O. JOHNSON

Additional Persons Participating in This Accident/Incident Investigation:

AUSTIN E COLLER (FAA)
4510 WEST INT'L AIRPORT ROAD
ANCHORAGE, AK 99515