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|  | | NTSB ID: SEA04IA035 | | Aircraft Registration Number: C-GTAQ | |
| | | Occurrence Date: 01/19/2004 | | Most Critical Injury: None | |
| | | Occurrence Type: Incident | | Investigated By: NTSB | |
| Location/Time | | | | | |
| Nearest City/Place Seattle | | State WA | Zip Code 98188 | Local Time 1138 | Time Zone PST |
| Airport Proximity: On Airport | | Distance From Landing Facility: | | Direction From Airport: | |
| Aircraft Information Summary | | | | | |
| Aircraft Manufacturer de Havilland | | Model/Series DHC-8 | | 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 January 19, 2004, at 1138 Pacific standard time, the flight crew of a de Havilland DHC-8, C-GTAQ, inadvertently landed on Taxiway Tango at Seattle-Tacoma International Airport, Seattle, Washington. There were no injuries to the Captain, First Officer, Flight Attendant, or any of the 32 passengers. There was no damage to the aircraft, which is owned and operated by Air Canada Jazz. The 14 CFR Part 129 scheduled air carrier flight, which departed Vancouver, British Columbia, Canada, about 35 minutes prior to the incident, was landing in visual meteorological conditions. The aircraft had been on an IFR flight plan.</p> <p>According to the flight crew, they were cleared by Seattle Center for a visual approach to Runway 16 Right. They contacted Seattle-Tacoma Tower when they were near Elliot Bay, and were cleared to land on Runway 16 Right, number two behind a 737 that was then touching down. Because of the distance between their position and the preceding 737, neither flight crew member saw the aircraft they were sequenced behind. The Captain, who was flying at the time, therefore aligned the aircraft with what he felt sure was Runway 16 Right. He then continued on the approach, and completed what to him seemed to be an uneventful landing. Soon after the aircraft touched down, the tower advised the flight crew that they had landed on Taxiway Tango.</p> <p>The Captain said that when they lined up on final approach, there was an overcast over the approach end of the runway (which was dry), bright sunshine to the south of the airport, and a glare on the runway surface. According to him, this caused the area around the approach end of the runway to appear as one dark color (shadow), making it hard to differentiate between Runway 16 Right and Taxiway Tango. He further stated that he had been into Seattle-Tacoma Airport many times before, and was aware of the large "X" just off the north end of Taxiway Tango. But, according to the Captain, because of the contrast between the runway glare and the dark area around the approach end, he did not notice that he had flown over the "X" just prior to touchdown.</p> <p>In a later discussion with the Investigator-In-Charge (IIC), the Captain stated that it was his opinion that lights on the aforementioned "X" along with some form of spaced-interval visual clues painted directly on Taxiway Tango would probably have alerted him to the misidentification of the landing surface in time to execute a safe go-around.</p> <p>The Safety Board's investigation of the incident revealed that this was the third known instance of a flight crew landing on this taxiway after mistaking it for Runway 16 Right. In addition, it was determined that in at least two other instances prior to the Air Canada Jazz incident, and one subsequent to the Air Canada Jazz incident, flight crews that had been cleared to land on Runway 16 Right lined up on Taxiway Tango, and maintained their approach to a point where they came close to landing on Taxiway Tango, but instead made either a last second go-around or a sidestep to landing on the active runway.</p> <p>The first of the reported events occurred at 1145 Pacific standard time, on December 2, 2000. The</p> | | | | | |
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Narrative (Continued)

aircraft was a Cessna 208 operated by Harbor Air as scheduled passenger flight number 4506. At the time of the event, the aircraft was being operated under visual flight rules (VFR), and had been cleared for a visual approach to Runway 16 Right. The surface observation at the time reported 10 miles visibility, and the lowest ceiling was a broken layer 2,200 feet above the ground (AGL).

The second reported event took place at 1620 Pacific standard time, on March 14, 2003. The aircraft was an American Airlines MD-80, being operated as scheduled passenger flight number 1763. The flight crew involved in this event had been established on the localizer for an instrument landing system (ILS) approach to Runway 16 Right, but transitioned to visual navigation once they broke out of the overcast about 3,500 feet AGL and about five miles from the runway. According to the information collected from the flight data recorder immediately after that event, the aircraft started a constant-rate deviation to the right of the localizer approximately the same time as the aircraft passed 3,500 feet AGL. This deviation was the result of the flight crew maintaining a heading between 153 degrees and 156 degrees magnetic, which was taking them directly to the "approach end" of Taxiway Tango (at that time designated Taxiway Charlie). Neither the Captain nor the First Officer were aware they had landed on the taxiway until advised by the tower. At the time of this event the visibility was reported as 10 miles, and the lowest ceiling was a 6,000 foot broken layer, with a 3,000 foot scattered layer below. A rain shower had recently moved through the area, and south of the field rays of sunlight were shining through holes in the clouds, resulting in a glare from the wet paved surfaces.

The third reported taxiway-landing was the Air Canada Jazz (regional) de Havilland DHC-8 that is the subject of this incident report.

The first of the three known events where flight crews came close to landing on Taxiway Tango, but ultimately took other actions, occurred in December of 1999. Because the data related to this event comes from the voluntary Air Safety Reporting System (ASRS), the information available is limited to the aircraft being a scheduled Part 121 air carrier passenger flight that landed between 0601 and 1200 on that day. The aircraft was a Boeing 737-800. According to the Captain of this flight, who filed the ASRS report, he was executing a visual approach to Runway 16 Right on a clear bright morning, when he suddenly realized that he had inadvertently lined up on Taxiway Charlie (Tango). Although he was on short final at the time, he was able to sidestep to the active runway. He further stated that of the three individuals on the flight deck, himself, the First Officer, and another captain in the jump seat, he was the only one who recognized the fact that they were about to land on the taxiway.

The second event wherein a flight crew nearly landed on Taxiway Tango occurred on January 10, 2004, at 1345 Pacific standard time. The aircraft was a Boeing 737-400 being operated by Alaska Airlines as a scheduled passenger flight. During this event an FAA Avionics Inspector was riding in the jumpseat when the flight crew was cleared for a visual approach to Runway 16 Right while they were approximately 10 miles north of the airport. After being cleared for the visual, the flight crew inadvertently lined up to land on Taxiway Tango. When the aircraft was about 300 feet AGL, on "very short final," the inspector pointed out to the crew that they were about to land on the taxiway. The flight crew then executed a go-around and completed a VFR closed pattern to land on the active runway. At the time of the event there was a 5,000 foot overcast, 10 miles visibility, and according to the FAA inspector, no glare or reflection from the area around the airport.

The third near-landing event on Taxiway Tango occurred on February 24, 2004, at approximately 0930 Pacific standard time. The aircraft was a Boeing 737-300 operated by Southwest Airlines as a scheduled passenger flight. According to the flight crew, while they were west of the airport, the flight was cleared for the Bay Visual Approach to Runway 16 Right. The First Officer, who was flying at the time, made a right turn over Elliott Bay and lined up on what he believed to be Runway 16 Right. When the aircraft was about one-half mile from the end of the taxiway, the first officer noticed an X located just off the northern end of the taxiway. Upon realizing he was lined up on the wrong surface he initiated a sidestep to Runway 16 Right. He subsequently completed an

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uneventful landing on Runway 16 Right, and taxied to the gate for a normal deplanement of the passengers. At the time of the event, the airport's paved surfaces were wet from a recent rain shower, and the Captain, who was backing up the First Officer during the approach, did not realize the aircraft was lined up on the taxiway until the First Officer initiated the sidestep maneuver.

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| | | Occurrence Type: Incident | | | |
| Landing Facility/Approach Information | | | | | |
| Airport Name | Airport ID: | Airport Elevation | Runway Used | Runway Length | Runway Width |
| Seattle-Tacoma Int. | KSEA | 433 Ft. MSL | 16R | 9425 | 150 |
| Runway Surface Type: Concrete | | | | | |
| Runway Surface Condition: Dry | | | | | |
| Type Instrument Approach: Visual | | | | | |
| VFR Approach/Landing: Full Stop | | | | | |
| Aircraft Information | | | | | |
| Aircraft Manufacturer | | Model/Series | | Serial Number | |
| de Havilland | | DHC-8 | | 180 | |
| Airworthiness Certificate(s): Transport | | | | | |
| Landing Gear Type: Retractable - Tricycle | | | | | |
| Homebuilt Aircraft? No | Number of Seats: | Certified Max Gross Wt. | 41000 LBS | Number of Engines: 2 | |
| Engine Type: | Engine Manufacturer: | Model/Series: | Rated Power: | | |
| Turbo Prop | de Havilland | DHC8/301 | 2380 HP | | |
| - Aircraft Inspection Information | | | | | |
| Type of Last Inspection | Date of Last Inspection | Time Since Last Inspection | Airframe Total Time | | |
| AAIP | | Hours | Hours | | |
| - Emergency Locator Transmitter (ELT) Information | | | | | |
| ELT Installed? | ELT Operated? | ELT Aided in Locating Accident Site? | | | |
| Owner/Operator Information | | | | | |
| Registered Aircraft Owner | | Street Address | | | |
| Jazz Air Inc. | | 310 Goudey Drive | | | |
| | | City | State | Zip Code | |
| | | Halifax International Airport | | B2T1E4 | |
| Operator of Aircraft | | Street Address | | | |
| Air Canada Jazz | | 5520 Miller Rd | | | |
| | | City | State | Zip Code | |
| | | Richmond, BC | | V7B1L9 | |
| Operator Does Business As: Canada Jazz | | | Operator Designator Code: | | |
| - Type of U.S. Certificate(s) Held: | | | | | |
| Air Carrier Operating Certificate(s): Foreign Operation | | | | | |
| Operating Certificate: | | | Operator Certificate: | | |
| Regulation Flight Conducted Under: Non-U.S., Commercial | | | | | |
| Type of Flight Operation Conducted: | | | | | |

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First Pilot Information

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

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

Certificate(s): Airline Transport

Airplane Rating(s): Multi-engine Land; Multi-engine Sea

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

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|---|---|
| Type Rating/Endorsement for Accident/Incident Aircraft? Yes | Current Biennial Flight Review? 02/2004 |
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|------------------------|--|------------------------------------|
| Medical Cert.: Class 1 | Medical Cert. Status: Valid Medical--w/ waivers/lim. | Date of Last Medical Exam: 11/2003 |
|------------------------|--|------------------------------------|

| - 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 | 14400 | 7500 | | | | | | | | |
| Pilot In Command(PIC) | | | | | | | | | | |
| Instructor | | | | | | | | | | |
| Last 90 Days | | | | | | | | | | |
| Last 30 Days | | | | | | | | | | |
| Last 24 Hours | | | | | | | | | | |

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

Flight Plan/Itinerary

Type of Flight Plan Filed: IFR

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|----------------------------------|-------|----------------------------|------------------------|------------------|
| Departure Point Vancouver, BC | State | Airport Identifier CYVR | Departure Time 1106 | Time Zone PST |
|----------------------------------|-------|----------------------------|------------------------|------------------|

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|---|-------|----------------------------|--|
| Destination Same as Accident/Incident Location | State | Airport Identifier KSEA | |
|---|-------|----------------------------|--|


Type of Clearance: IFR

Type of Airspace: Class D

Weather Information

Source of Briefing: Company; Flight Service Station

Method of Briefing: Unknown

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|---------------------------------------|---------------------|--|---------------|---------------------------------|------------------------------|
| Weather Information | | | | | |
| WOF ID | Observation Time | Time Zone | WOF Elevation | WOF Distance From Accident Site | Direction From Accident Site |
| KSEA | 1156 | PST | 433 Ft. MSL | 0 NM | Deg. Mag. |
| Sky/Lowest Cloud Condition: Scattered | | | 4300 Ft. AGL | Condition of Light: Day | |
| Lowest Ceiling: Broken | | 7000 Ft. AGL | | Visibility: 10 SM | Altimeter: 30.15 "Hg |
| Temperature: 11 °C | Dew Point: 7 °C | Wind Direction: Variable | | Density Altitude: Ft. | |
| Wind Speed: Light and Variable | Gusts: | Weather Conditions at Accident Site: Visual Conditions | | | |
| Visibility (RVR): Ft. | Visibility (RVV) SM | Intensity of Precipitation: | | | |
| Restrictions to Visibility: None | | | | | |
| Type of Precipitation: None | | | | | |

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|-----------------------------|---------------------|--------------------------|
| Accident Information | | |
| Aircraft Damage: None | Aircraft Fire: None | Aircraft Explosion: None |

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|--|-------|---------|-------|------|-------|
| Classification: Foreign 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 | 1 |
| Other Crew | | | | | |
| Passengers | | | | 32 | 32 |
| - TOTAL ABOARD - | | | | 35 | 35 |
| Other Ground | | | | | |
| - GRAND TOTAL - | | | | 35 | 35 |

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AVIATION



NTSB ID: SEA04IA035

Occurrence Date: 01/19/2004

Occurrence Type: Incident

Administrative Information

Investigator-In-Charge (IIC)

Orrin K. Anderson

Additional Persons Participating in This Accident/Incident Investigation:

Harold Hutchins
Seattle FSDO
1601 Lind Ave SW
Renton, WA 98055