
Nose gear collapse, Douglas DC-9-51, August 8, 1996

Micro-summary: The nose landing gear of this Douglas DC-9-51 collapsed during landing.


Event Date: 1996-08-08 at 757 HST


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


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

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|---|--|---------------------------------|----------------------------------|--------------------------------------|------------------|
|  | | NTSB ID: LAX96IA300 | | Aircraft Registration Number: N420EA | |
| | | Occurrence Date: 08/08/1996 | | Most Critical Injury: None | |
| | | Occurrence Type: Incident | | Investigated By: NTSB | |
| Location/Time | | | | | |
| Nearest City/Place HONOLULU | | State HI | Zip Code 96820 | Local Time 0757 | Time Zone HST |
| Airport Proximity: On Airport | | Distance From Landing Facility: | | Direction From Airport: | |
| Aircraft Information Summary | | | | | |
| Aircraft Manufacturer Douglas | | Model/Series DC-9-51 | | 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 August 8, 1996, at 0757 hours Hawaiian standard time, a Douglas DC-9-51, N420EA, was brought to a stop on runway 8R after the nose landing gear collapsed during landing at Honolulu International Airport, Honolulu, Hawaii. The aircraft, which received minor damage, was operated by Hawaiian Airlines, Inc., under 14 CFR Part 121, as flight 113. There were no injuries among the 71 passengers, 3 cabin crew, and 2 cockpit crew aboard. The flight was on an instrument flight plan and departed Honolulu in visual meteorological conditions about 0700 destined for Lihue, Hawaii. It returned to Honolulu without landing at Lihue when the unsafe nose gear indication was observed during the approach there.</p> <p>Personnel from the FAA's Honolulu Flight Standards District Office reported that the flight crew observed alignment marks on the nose gear linkage through an inspection window in the cockpit which confirmed that the nose gear was not locked down. En route back to Honolulu, the captain declared an emergency, ordered emergency equipment, and instructed the cabin crew to prepare the cabin. The cabin crew reported that there was ample time to prepare the cabin and that the landing was uneventful until the aircraft was relatively slow and the nose gear gently collapsed. The aircraft came to a stop on the runway on its nose. There was some smoke and burning odor in the cabin and the cockpit crew ordered an evacuation of the cabin. About 25 passengers exited via the aft slide before crash and rescue personnel arrived and determined that it would be safe to deplane the remaining passengers through the forward doors using stepladders. Four people went to the hospital for observation; two were the front cabin flight attendants and two others were non-revenue flight attendants aboard the flight.</p> <p>Investigation revealed that a flexible hydraulic hose was not secured in the nosewheel well. The flexible hose had been temporarily installed in the nosewheel steering system to replace a previously broken fixed line. The hose become trapped in the nose gear over center, down lock mechanism (Douglas part numbers 3913968-13 and 5920210-3) during the gear extension. The incident occurred on the first flight cycle following the maintenance alteration of the hose installation.</p> | | | | | |
| FACTUAL REPORT - AVIATION | | | | | |

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|  National Transportation Safety Board FACTUAL REPORT AVIATION | | NTSB ID: LAX961A300 | | | |
| | | Occurrence Date: 08/08/1996 | | | |
| | | Occurrence Type: Incident | | | |
| Landing Facility/Approach Information | | | | | |
| Airport Name | Airport ID: | Airport Elevation | Runway Used | Runway Length | Runway Width |
| HONOLULU INTERNATIONAL | HNL | 13 Ft. MSL | 8R | 12000 | 200 |
| Runway Surface Type: Asphalt | | | | | |
| Runway Surface Condition: Dry | | | | | |
| Type Instrument Approach: | | | | | |
| VFR Approach/Landing: | | | | | |
| Aircraft Information | | | | | |
| Aircraft Manufacturer | | Model/Series | | Serial Number | |
| Douglas | | DC-9-51 | | 47689 | |
| Airworthiness Certificate(s): Transport | | | | | |
| Landing Gear Type: Retractable - Tricycle | | | | | |
| Homebuilt Aircraft? No | Number of Seats: 144 | Certified Max Gross Wt. | 122000 LBS | Number of Engines: 2 | |
| Engine Type: | Engine Manufacturer: | Model/Series: | Rated Power: | | |
| Turbo Fan | P&W | JT8D-17 | 16000 LBS | | |
| - Aircraft Inspection Information | | | | | |
| Type of Last Inspection | Date of Last Inspection | Time Since Last Inspection | Airframe Total Time | | |
| Continuous Airworthiness | 08/1996 | 1 Hours | 41097 Hours | | |
| - Emergency Locator Transmitter (ELT) Information | | | | | |
| ELT Installed? No | ELT Operated? | ELT Aided in Locating Accident Site? | | | |
| Owner/Operator Information | | | | | |
| Registered Aircraft Owner | | Street Address | | | |
| HAWAIIAN AIRLINES, INC. | | 3375 KOAPAKA ST, STE G-350 | | | |
| | | City | State | Zip Code | |
| | | HONOLULU | HI | 96819 | |
| Operator of Aircraft | | Street Address | | | |
| Same as Reg'd Aircraft Owner | | Same as Reg'd Aircraft Owner | | | |
| | | City | State | Zip Code | |
| | | | | | |
| Operator Does Business As: | | | Operator Designator Code: HAL | | |
| - 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/Cargo | | | | | |
| FACTUAL REPORT - AVIATION | | | | | |

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| | Occurrence Type: Incident |

First Pilot Information

| | | | | |
|-----------------|-----------------|------------------|--------------------------|-----------|
| Name On File | City On File | State On File | Date of Birth On File | Age 38 |
|-----------------|-----------------|------------------|--------------------------|-----------|

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

Certificate(s): Airline Transport

Airplane Rating(s): Multi-engine Land; Single-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: Valid Medical--no waivers/lim. | Date of Last Medical Exam: 05/1996 |
|------------------------|--|------------------------------------|

| - 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 | 11000 | 4200 | | | | | | | | |
| Pilot In Command(PIC) | | | | | | | | | | |
| Instructor | | | | | | | | | | |
| Last 90 Days | 205 | | | | | | | | | |
| Last 30 Days | 59 | | | | | | | | | |
| Last 24 Hours | 1 | | | | | | | | | |

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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

| | | | | |
|---|-------|---------------------------|------------------------|------------------|
| Departure Point Same as Accident/Incident Location | State | Airport Identifier HNL | Departure Time 0700 | Time Zone HST |
|---|-------|---------------------------|------------------------|------------------|

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|----------------------|-------------|---------------------------|--|
| Destination LIHUE | State HI | Airport Identifier LIH | |
|----------------------|-------------|---------------------------|--|


Type of Clearance: IFR

Type of Airspace: Class B

Weather Information

Source of Briefing:
Company


Method of Briefing:

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|---------------------------------------|-----------------------|--|-------------------|---------------------------------|------------------------------|
| Weather Information | | | | | |
| WOF ID | Observation Time | Time Zone | WOF Elevation | WOF Distance From Accident Site | Direction From Accident Site |
| HNL | 0745 | HST | 13 Ft. MSL | 0 NM | 0 Deg. Mag. |
| Sky/Lowest Cloud Condition: Scattered | | | 2500 Ft. AGL | Condition of Light: Day | |
| Lowest Ceiling: None | | 0 Ft. AGL | Visibility: 20 SM | Altimeter: 30.00 | "Hg |
| Temperature: 27 °C | Dew Point: 17 °C | Wind Direction: 70 | | Density Altitude: Ft. | |
| Wind Speed: 8 | 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 | | | | | |

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

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|---|-------|---------|-------|------|-------|
| 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 | | | | 3 | 3 |
| Other Crew | | | | | |
| Passengers | | | | 71 | 71 |
| - TOTAL ABOARD - | | | | 76 | 76 |
| Other Ground | 0 | 0 | 0 | | 0 |
| - GRAND TOTAL - | 0 | 0 | 0 | 76 | 76 |

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Administrative Information

Investigator-In-Charge (IIC)
RICHARD B. PARKER

Additional Persons Participating in This Accident/Incident Investigation:

HERBERT YOUNG
FAA - WP-HON-FSDO
HONOLULU, HI 96819

ELFI STODDARD
ASSOC. OF FLIGHT ATTENDANTS
WASHINGTON, DC 20036

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DIR. QC, HAWAIIAN AIRLINES
HONOLULU, HI 90020