



National Transportation Safety Board Aviation Accident Data Summary

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|--------------------------------|-----------------------------|-------------------------|------------|
| Location: | MCGRATH, AK | Accident Number: | ANC98LA014 |
| Date & Time: | 01/02/1998, 1526 AST | Registration: | N861TA |
| Aircraft: | Douglas DC-6B | Injuries: | 3 None |
| Flight Conducted Under: | Part 125: 20+ Pax,6000+ lbs | | |

Analysis

During the takeoff roll, while passing 45 knots indicated airspeed, ice formed between the inner and outer panes of the airplane's windshield, obscuring the crew's vision. The flight crew aborted the takeoff, the airplane drifted off the left side of the snow covered runway, and caught fire. The crew reported the airplane and windshield were cold soaked and the temperature was -10 degrees Fahrenheit. The windshield anti-ice system blows air from a combustion heater between the windshield glass panes. The air source for the heater, once the airplane has forward airspeed, is two leading edge wing scoops. The crew told the NTSB investigator that the taxi time was too short for the windshield to warm up, and that during the taxi, snow was circulated around the airplane and into the wing scoops.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The ingestion of snow into the windshield anti-ice system, and the resulting obscured windshield which made runway alignment not possible. Factors associated with this accident were the cold windshield, the reduced performance of the windshield anti-ice because of the short taxi by the crew, and the insufficient information on the system provided by the manufacturer.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) ANTI-ICE/DEICE SYSTEM,WINDSHIELD - ICE INGESTION
2. (F) ANTI-ICE/DEICE SYSTEM,WINDSHIELD - TOO COLD
3. (F) ANTI-ICE/DEICE SYSTEM - DIMINISHED - PILOT IN COMMAND
4. (F) INFORMATION INSUFFICIENT - KIT MANUFACTURER

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - ABORTED

Findings

5. WINDOW,FLIGHT COMPARTMENT WINDOW/WINDSHIELD - OBSTRUCTED
6. (C) PROPER ALIGNMENT - NOT POSSIBLE - PILOT IN COMMAND
7. TERRAIN CONDITION - BERM

Occurrence #3: FIRE
Phase of Operation: TAKEOFF - ABORTED

Pilot Information

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|----------------------------------|---|------------------------------|---|
| Certificate: | Airline Transport; Flight Instructor; Commercial; Flight Engineer | Age: | 55 |
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Instrument Rating(s): | Airplane |
| Other Aircraft Rating(s): | None | Instructor Rating(s): | Airplane Multi-engine; Airplane Single-engine |
| Flight Time: | 27000 hours (Total, all aircraft), 16000 hours (Total, this make and model), 24000 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 55 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|---------------------------------------|-----------------------------|-----------------------------|-----------------|
| Aircraft Make: | Douglas | Registration: | N861TA |
| Model/Series: | DC-6B DC-6B | Engines: | 4 Reciprocating |
| Operator: | WOODS AIR FUEL, INC. | Engine Manufacturer: | P&W |
| Operating Certificate(s) Held: | Air Cargo | Engine Model/Series: | R-2800-CB-16 |
| Flight Conducted Under: | Part 125: 20+ Pax,6000+ lbs | | |

Meteorological Information and Flight Plan

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|---|---------------------------|-------------------------------------|-------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | , 0 ft msl | Weather Information Source: | Pilot |
| Lowest Ceiling: | None / 0 ft agl | Wind Speed/Gusts, Direction: | Calm / , Variable |
| Temperature: | -23 °C | Visibility | 60 Miles |
| Precipitation and Obscuration: | | | |
| Departure Point: | NIXON FORK MINE, AK (NFR) | Destination: | PALMER, AK (PAQ) |

Airport Information

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|-----------------------------|-----------------------------|----------------------------------|----------------|
| Airport: | NIXON FORK MINE STRIP (NFR) | Runway Surface Type: | Snow |
| Runway Used: | 34 | Runway Surface Condition: | Dry; Snow--dry |
| Runway Length/Width: | 4200 ft / 85 ft | | |

Wreckage and Impact Information

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|-----------------------------|--------|----------------------------|-----------|
| Crew Injuries: | 3 None | Aircraft Damage: | Destroyed |
| Passenger Injuries: | N/A | Aircraft Fire: | On-Ground |
| Ground Injuries: | N/A | Aircraft Explosion: | On-Ground |
| Latitude, Longitude: | | | |

Administrative Information

Investigator In Charge (IIC): MATTHEW L THOMAS

Adopted Date: 02/15/2001

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 pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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