



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	DURANGO, CO	<b>Accident Number:</b>	DEN88FA061
<b>Date &amp; Time:</b>	02/02/1988, 2032 MST	<b>Registration:</b>	N5808
<b>Aircraft:</b>	CONVAIR 580	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Minor, 2 None

**Flight Conducted Under:** Part 121: Air Carrier - Scheduled

---

## Analysis

AFTER MAKING AN IFR APPROACH, THE PILOT MADE A GO-AROUND BECAUSE HE WAS BLINDED BY THE REFLECTION OF THE LANDING/TAXI LIGHTS AGAINST THE FALLING SNOW. THE PILOT LANDED THE AIRCRAFT AFTER THE SECOND APPROACH. THE PILOT SAID HE SENSED THE AIRCRAFT DRIFTING TO THE LEFT AND HE TRIED TO CORRECT, BUT IT COLLIDED WITH A SNOW BANK. THE INVESTIGATION DISCLOSED NO EVIDENCE OF AIRCRAFT HYDROPLANING OR SKIDDING. AIRPORT MANAGEMENT ELECTED TO DELAY PLOWING THE RUNWAY FOR FEAR OF IT FREEZING OVER. PASSENGERS CLAIMED THERE WAS 2-3 INCHES OF SNOW ON TOP OF A 3/4- INCH LAYER OF SLUSH. FURTHER INVESTIGATION REVEALED THAT THE RUNWAY LIGHTS WERE OF VARIOUS INTENSITIES BECAUSE SOME UNAPPROVED LIGHT BULBS OF DIFFERENT AMPERAGE WERE USED. THE RUNWAY WAS NOT EQUIPPED WITH CENTERLINE LIGHTING. THE PAINTED WHITE CENTERLINE STRIPE WAS COVERED BY SNOW AND SLUSH.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

## Findings

---

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: LANDING - ROLL

### Findings

1. (F) AIRPORT FACILITIES,RUNWAY MARKING - FOREIGN SUBSTANCE COVERED
2. (C) AIRPORT SNOW REMOVAL - INADEQUATE - AIRPORT PERSONNEL
3. (F) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SNOW COVERED
4. (F) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - SLUSH COVERED
5. (C) PROPER ALIGNMENT - NOT MAINTAINED - PILOT IN COMMAND
6. TERRAIN CONDITION - SNOWBANK
7. (F) AIRPORT FACILITIES,CENTERLINE LIGHTS - UNAVAILABLE
8. (F) AIRPORT FACILITIES,RUNWAY EDGE LIGHTS - UNAPPROVED
9. (F) LIGHT CONDITION - DARK NIGHT

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	41, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<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>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	08/26/1987
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	7342 hours (Total, all aircraft), 2858 hours (Total, this make and model), 4211 hours (Pilot In Command, all aircraft), 221 hours (Last 90 days, all aircraft), 98 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CONVAIR	<b>Registration:</b>	N5808
<b>Model/Series:</b>	580 580	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Transport	<b>Serial Number:</b>	348
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	53
<b>Date/Type of Last Inspection:</b>	01/23/1988, Continuous Airworthiness	<b>Certified Max Gross Wt.:</b>	54600 lbs
<b>Time Since Last Inspection:</b>	66 Hours	<b>Engines:</b>	2 Turbo Prop
<b>Airframe Total Time:</b>	53781 Hours	<b>Engine Manufacturer:</b>	ALLISON
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	501D-13-H
<b>Registered Owner:</b>	ASPEN AIRWAYS, INC.	<b>Rated Power:</b>	3750 hp
<b>Operator:</b>	ASPEN AIRWAYS, INC.	<b>Operating Certificate(s) Held:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>	UNITED EXPRESS	<b>Operator Designator Code:</b>	ASPA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	DRO, 6685 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	2037 MST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	5 Miles
Lowest Ceiling:	Obscured / 500 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	1° C
Precipitation and Obscuration:			
Departure Point:	DENVER, CO (DEN)	Type of Flight Plan Filed:	IFR
Destination:	DURANGO, CO (DRO)	Type of Clearance:	IFR
Departure Time:	1855 MST	Type of Airspace:	Class E

## Airport Information

Airport:	LA PLATA COUNTY (DRO)	Runway Surface Type:	Asphalt
Airport Elevation:	6685 ft	Runway Surface Condition:	Snow--wet
Runway Used:	2	IFR Approach:	ILS
Runway Length/Width:	9200 ft / 150 ft	VFR Approach/Landing:	Straight-in

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor, 2 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	ARNOLD W SCOTT	Report Date:	04/25/1989
Additional Participating Persons:	RICHARD W RUNDELL; SALT LAKE CITY, UT PETER L BAURER; DENVER, CO GERALD B HICKMAN; DENVER, CO TODD J MCLAUGHLIN; DENVER, CO		
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:pubinquiry@ntsb.gov">pubinquiry@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> .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).