



# National Transportation Safety Board Aviation Accident Final Report

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<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
<b>Flight Conducted Under:</b>	Part 121: Air Carrier - Scheduled		

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## 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 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 Manufacturer:</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>Air Carrier Operating Certificate:</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	Observation Time:	2037 MST
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Temperature/Dew Point:	1° C
Lowest Ceiling:	Obscured / 500 ft agl	Visibility	5 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	0 ft
Altimeter Setting:	29 inches Hg	Visibility (RVV):	0 Miles
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	Adopted 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:pubinq@ntsb.gov">pubinq@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> .		

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