



National Transportation Safety Board
Office of Aviation Safety
Washington, D.C. 20594-2000
April 4, 2001

METEOROLOGY FACTUAL REPORT

A. ACCIDENT

Location: Carlsbad, New Mexico

Date: August 19, 2000

B. METEOROLOGICAL SPECIALIST

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Washington, D.C. 20594-2000

C. DETAILS OF INVESTIGATION

All the weather data used in this report was obtained from official National Weather Service (NWS) sources and the National Climatic Data Center (NCDC). All times are in Mountain Daylight Time (MDT) based upon the 24 hour clock. Directions are referenced to true north and distances in nautical miles. Heights are above mean sea level (MSL) unless otherwise noted in weather observations and forecasts, where they are reported above ground level (AGL). Visibility is in statute miles and fractions of statute miles.

1.0 Synoptic Situation

The NWS Surface Analysis Chart at 1600 MDT on August 18, 2000 indicated a stationary front over northern Texas into extreme southeast Oklahoma and southern Arkansas. A high pressure system at 1023 millibars (mb) was located over the New Mexico and Colorado boarder, with a second high pressure system noted over northern Arizona at 1018 mb. A high pressure ridge extended over the Carlsbad, New Mexico area from these high pressure systems.

Another feature over the southwest during the period was a decaying tropical depression indicated as a low pressure system with a central pressure of 1008 mb was depicted over southern Nevada.

The station models on the Surface Analysis Chart indicated southerly winds over southeast New Mexico, with wind speeds from 5 to 10 knots. The station models indicated clear skies and no obstructions to visibility or any other reported weather phenomena. Temperatures were in the mid 90's (degrees Fahrenheit).

2.0 Surface Observations

Cavern City Air Terminal (KCNM), located 5 miles southwest of the city of Carlsbad, New Mexico, at an elevation of 3,295 feet was the closest weather reporting facilities to the accident site. Weather observations from August 18 through August 19, 2000, were reviewed and documented for conditions surrounding the time of the accident.

Winds: 12 knots or less during the period and predominately from the south. During the evening hours on August 18, 200, into the early morning hours on August 19, 2000, winds were calm.

Visibility: ranged from 30 to 50 statute miles with no restrictions to visibility.

Weather phenomena: None reported, including no recorded precipitation.

Sky condition: ranged from clear to scattered high level clouds.

Temperature: high 98.9 degrees F, low of 68 degrees F.

3.0 National Storm Prediction Center Records

The NWS National Storm Prediction Center (NSPC) located in Norman, Oklahoma, reported no severe thunderstorms or tornadic activity was recorded for the Carlsbad area or in Eddy county New Mexico, from August 1 through August 19, 2000.

4.0 National Climatic Data Center Records

The NWS National Climatic Data Center (NCDC) located in Ashville, North Carolina, maintains the climatical records for the United States. The NWS NCDC records indicate the following conditions for New Mexico for the period in question:

- July-August 2000 temperatures were running 1.8 to 3.6 degrees F warmer than normal.
- July-August 2000 extreme maximum temperatures ranged from 100 to 105 degrees F. The New Mexico extreme temperatures for August on record ranged from a high of 115 degrees F, to a low of 23 degrees F.
- June-August 2000 precipitation was 0 to 20 percent below normal.

5.0 Astronomical Data

Data from the U.S. Naval Observatory located in Washington, D.C. indicated the following:

August 20, 2000

Sunset	19:38 MDT
End of civil twilight	20:04 MDT
Moonrise	21:58 MDT

August 19, 2000

Begin of civil twilight	05:59 MDT
Sunrise	06:24 MDT
Moonset	10:26 MDT

The phase of the Moon on August 18, 2000 was a waning gibbous with 88% of the Moons visible disk illuminated. A full Moon had occurred on 14 August at 11:13 PM MDT.

Donald E. Eick
NTSB Meteorologist