

## August 2007 - Operations Report

**August 1, 2007** - Seeding operations were conducted over Glasscock (9), Reagan (5), and Sterling (14) with good results. 28 flares were burned within six small clouds. A low over Mexico, surface heating, and later outflow boundaries helped to develop a showers and storms over the northern target.

**August 2, 2007** - Seeding operations were conducted over Irion (12), Reagan (4), and Sterling (20) with good results. 36 flares were burned within four clouds. Outflow boundaries from an MCS dispensing heavy rains on Crockett and surface heating developed showers and storms over the northern target.

**August 3, 2007** - Seeding operations were conducted over Irion (12), Reagan (2), and Tom Green (2) with fair results. 16 flares were burned within four small clouds. Surface heating helped developed showers over the central target.

**August 29, 2007** - Seeding operations were conducted over Crockett (12), Schleicher (2), and Sutton (2) with fair results. 9 flares were burned within three small clouds. Surface heating and weak convergence helped developed showers over the southeastern target.

**August 30, 2007** - Seeding operations were conducted over Crockett (5), Schleicher (7), and Sterling (2) with fair results. 14 flares were burned within three small clouds. Surface heating and weak convergence along a cold front helped to develop showers over the target area.

**August 31, 2007** - Seeding operations were conducted over Crockett (1) and Sutton (2) with fair results. 3 flares were burned within two small clouds. Surface heating and an upper-low/shear axis helped to produce marginal clouds. This is the sixth day for seeding in August and 37<sup>th</sup> day for seeding during the season.

The month of July contained 6 days of operations:

<b>Date</b>	<b>Flares</b>	<b>Counties seeded</b>
1	28	Glasscock, Reagan, Sterling
2	36	Irion, Reagan, Sterling
3	16	Irion, Reagan, Tom Green
29	9	Crockett, Schleicher, Sutton
30	14	Crockett, Schleicher, Sterling
31	3	Crockett, Sutton
<b>Total Flares: 106</b>		

The general weather pattern for August began with short-wave impulses producing scattered showers across the region with very high totals over localized areas. A high pressure ridge then set up over the Central Plains. The ridge became prominent over the western states and the southeast which would allow for a stagnant upper-low/shear-axis to develop later. This shear-axis meandered across east Texas during the last week of August into September. The Polar Jet continued to be less amplified, located mainly across southern Canada. This August was more typical of a west Texas summer where temperatures were in the 90's but San Angelo failed to reach 100°. Despite the month being seemingly hot and dry, remnants from Tropical Storm Erin provided well above average rains for much of the target area the 16<sup>th</sup> through the 18<sup>th</sup>. Mathis field was 4.50 inches above normal for August and 14.25 inches above for the year. August rainfall at San Angelo is the 7<sup>th</sup> highest monthly rainfall on record. An MCS or Mesoscale Convective System moved very slowly over the Permian Basin including Crockett County on the

2<sup>nd</sup>. It presented Midland with a daily rainfall record totaling 2.72 inches; placing Midland International 1.40 inches above in August and 9.12 inches above normal for the year. Abilene reached a record also this month with a record monthly rainfall of 7.07 inches placing it fourth on record. Abilene is 15.90 inches above normal for the year.

Monthly rain gauge measurements from nearest locations inside and outside of the target area recorded either by the National Weather Service or Weatherbug Sites are provided.

5.04	Grape Creek
5.73	Eldorado
1.22	McCamey
3.39	Barnhart
<b>6.55</b>	Mathis Field
3.18	Junction
<b>7.07</b>	Abilene
3.17	Midland
<b>7.26</b>	Sonora
3.68	Big Spring
4.61	Mertzton