

**SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - PLEASANTON, TEXAS**

**SEEDING REPORT - JULY 7, 2009**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Weak diffluence at 250mb with cyclonic curvature to the flow over Texas; 500mb high centered over northwestern Mexico with ridging southeastward into Texas and northeastward into the northern Plains; 500mb lows over British Columbia and Ontario, the latter associated with a trough over the eastern U.S.; shortwave at 500mb and 700mb moving south across Texas; good moisture availability, with PW values 1.85"-2.10"; moderate to strong instability, with CAPE values to 3500 J/kg and LI's to -8; convective temperatures in the mid 90s; seabreeze front moving inland during the late afternoon hours.

**LIFTING MECHANISM:**

Intense surface heating; lift from approaching shortwave.

**DISCUSSION:**

A weak disturbance riding south around the eastern side of the large subtropical high helped induce lift which worked with intense daytime heating and sufficient moisture to produce a few showers and thunderstorms across the northern target area. A flight was sent around mid-afternoon to investigate, with seeding of a few clouds along the Medina/Uvalde county line. These merged into one larger system and continued to move south. Early in the evening, a large cell moved south across the west side of San Antonio near the Medina County line. A second flight was launched to investigate, with seeding of this cell taking place.

**WATCHES/WARNINGS/LIMITATIONS:**

Severe T-storm: SW Bexar/E-cent. Medina Cos.: 0014-0100 UTC.  
Severe T-storm: NW Atascosa/SW Bexar/SE Medina/NE Frio Cos.: 0053-0145 UTC.

The pyrotechnics were 40g flares. 18 flares were burned in Medina (14) and Uvalde (4) counties, totaling 720g of AgI.