

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

SEEDING REPORT – July 7, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Mostly clear over south Texas this morning, with patchy fog east of San Antonio and isolated showers and thunderstorms along the coast. Strong high pressure over the Southwest US looks to slowly move back west throughout the day, and this combined with a weak front over central TX could lead to isolated to scattered showers and storms across central and southern TX. A strong seabreeze could also bring scattered showers and storms to the coast and coastal plains later this morning and through the afternoon. High temperatures in the upper 90's, lower 100's with slightly cooler temps over hill country and along the coast. Partly cloudy overnight with low temps in the lower to mid 70's. Patchy fog possible after midnight.

LIFTING MECHANISM:

Daytime heating, seabreeze, and outflow boundaries. Perhaps weak rainband associated with Tropical Wave moving onshore south of Brownsville

THERMODYNAMIC INDICES (12Z KCRP)

KCRP Freezing Level (m)	4758.69	KDRT Freezing Level (m)	4783.11
Precipitable Water (Inches)	2.08	CAPE (J/Kg)	2279.29
LCL (m)	13.00	CINH (J/Kg)	2.15
CCL (m)	773.26	LI (degrees C)	-5.70
Cloud Base (m)	1203	PB	5.5
Warm Cloud Depth (m)	3555.69	Cloud Base Temp (°C)	21
CRP ICA	-5.9	DRT ICA	-8.2

DISCUSSION: A weak seabreeze began moving onshore around 16Z with numerous small showers developing all along the coast. Storms started to take shape just before 18Z. Pilot started seeding small showers around 18:15Z in Karnes county. Pilot continued to follow and seed small showers through Karnes and into northern Live Oak counties. Pilot continued to occasionally find weak inflow into different showers, however by 19:30Z most of the showers were weakening as they entered McMullen, Atascosa, and Wilson counties. Second line of storms formed in Bee county from another seabreeze. Sent pilot to that direction after 19:30Z. Pilot began seeding a strong storm in southern Bee county just before 20Z. Storm had 60+ dBZ and strong inflow so had pilot put a decent amount of seeding material into the storm. After pilot finished seeding the storm stalled and persisted for a while before gradually weakening. A line of storms formed from Bee county off to the southwest with the seeded storm on the far northeast corner. A Topical Wave was moving onshore south of Brownsville during the afternoon. The line seemed to be part of a second seabreeze/rainband that began weakening when we started seeding. Pilot seeded a few more storms in Bee and Karnes counties before landing for fuel and more flares.

Warnings: None

Seeded cell ID's: 27, 54, 112, 176, 681, 698

Flight Information:

Time (UTC)	Plane	Flare Location	County
18:05	160P	In air	
18:14	160P	82° @ 41 NM	Karnes
18:15	160P	28 @ 40	Karnes
18:24	160P	101 @ 30	Karnes
18:25	160P	101 @ 31	Karnes
18:29	160P	100 @ 32	Karnes
18:29	160P	99 @ 31	Karnes
18:30	160P	99 @ 31	Karnes
18:40	160P	122 @ 25	Live Oak
18:51	160P	92 @ 30	Karnes
18:51	160P	92 @ 29	Karnes
19:19	160P	111 @ 14	Atascosa
19:20	160P	107 @ 14	Atascosa
19:57	160P	117 @ 47	Bee
19:58	160P	116 @ 46	Bee
19:59	160P	113 @ 46	Bee
20:00	160P	112 @ 46	Bee
20:01	160P	115 @ 45	Bee
20:03	160P	119 @ 45	Bee
20:04	160P	121 @ 44	Bee
20:05	160P	124 @ 43	Bee
20:06	160P	121 @ 44	Bee
20:07	160P	120 @ 44	Bee
20:30	160P	121 @ 43	Bee
20:31	160P	122 @ 43	Bee
20:37	160P	119 @ 34	Bee
20:38	160P	119 @ 34	Bee
20:46	160P	123 @ 34	Bee
20:57	160P	95 @ 40	Karnes
20:58	160P	96 @ 40	Karnes
20:59	160P	98 @ 41	Karnes
21:00	160P	94 @ 41	Karnes
21:21	160P	Landed	

Seeding operations were conducted over Atascosa (4 + 0H), Bee (30 + 2H) Karnes (26 + 2H), and Live Oak (2 + 0H) counties. 62 flares plus 4 hygroscopic flares were burned within 6 clouds. This is the 2nd day for seeding in July and the 15th day for seeding during the season.