SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION – Pleasanton, TEXAS

SEEDING REPORT – August 7, 2018

SYNOPTIC/MESOSCALE CONDITIONS:

Upper air analysis shows a positively tilted trough across the north with a ridge of high pressure across the Southwest and Southeast and a weak disturbance centered across southern Louisiana. At the surface, mainly ridging with a low/trough axis located across Southwest. The flow at upper levels is mainly from the east with it calm at the surface. The current dew point temperature is low 70's and the environmental temperature in the mid 70's with scatter to broken low to mid-level clouds pushing through our area. For today, slightly similar conditions as yesterday is expected as weak upper disturbance across the East Texas and Louisiana moves off shore. This low will push southward off shore bringing a slight chance for showers and thunderstorms in the form of sea-breeze. Else, expect a few morning and afternoon passing clouds with temperature at or above the normal for this time of the year. The dew point temperature is forecast to be mid to upper 60's across much of the target zone with it possibly getting into the low 70's across the southeastern part of the zone by this afternoon. This will cause the feel like temperature to be 4 to 6 degrees warmer than the actual temperature today through Wednesday. Wednesday through Thursday expect much more of a quiet condition with the remnants of the upper low continues to push south into eastern Mexico and stable air mass moves in ahead of an incoming trough of low pressure on Friday across the Central Plains. The slow-moving trough will bring a very slight chance for showers and thunderstorms mainly across the northern counties on Friday. The precipitation is not expected to be widespread but just maybe a few pop-up cells possibly across the far northern counties ahead of the upper trough. More on this as we get closer to the event.

LIFTING MECHANISM:

Low Level Moisture Advection, Low Level Warm Air Advection, Sea-Breeze

THERMODYNAMIC INDICES (12Z KCRP)

Freezing Level (m)	4945.08	CAPE (J/Kg)	1458.2
Precipitable Water (inches)	1.99	CINH (J/Kg)	35.61
LCL	777.21	LI(°C)	-3.26
CCL	1304.51	PB	-3.26
CRP ICA	-18.00	Cloud Base Temp (°C)	22.8
Cloud Base (meters)	1142.09		
Warm Cloud Depth (meters)	3802.99		

DISCUSSION:

Sea-Breeze activity continues today but with not a lot of cells developing mainly across the southeastern counties. Showers and thunderstorms developed in the afternoon when aircraft 160P was launched. Most of the cells had fairly good inflow but not that impressive. 160P was launch across the Bee County where is hit three cells but did not release the maximum dosages of seeding material due to fair inflow rates. After cells started dying and no fresh cells popped-up, 160P headed back to base. After a while, 160P was relaunched back over the western side of the Bee County where weak cells developed. When 160P arrived, the cells were no good and so 160P headed to the McMullen County where it seeded a cell by releasing a few dosages of seeding material in it. Aircraft 47P was also launched across the Bee County

where it was able to seed two cells. 47P did not seed the cells with the maximum dosages as the they were unimpressive. 160P headed back to base but on its way back it tried to seed another weak cell across the Bee County with a few dosages of seeding materials. Also, 47P was sent to the same cell that 160P had intercepted to take a look at it, but the cell did not have any good inflow. Both aircrafts returned to base after conditions calmed down. Even though conditions were not all that great, we were able to seed several cells.

WATCHES/WARNINGS:
N/A

SEEDED CELL ID'S:

116	25	45	130	167	190	--			

FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
18:15	**160P**	**In Air**	
18:20	**160P**	**105° @ 45 nm**	**Bee**
18:20	**160P**	**106° @ 44 nm**	**Bee**
18:21	**160P**	**104° @ 45 nm**	**Bee**
18:37	**160P**	**123° @ 47 nm**	**Bee**
18:46	**160P**	**120° @ 49 nm**	**Bee**
18:46	**160P**	**120° @ 49 nm**	**Bee**
18:48	**160P**	**121° @ 50 nm**	**Bee**
18:49	**160P**	**121° @ 49 nm**	**Bee**
19:30	**160**	**Recon**	
19:45	**160P**	**In Air**	
20:44	**160P**	**172° @ 36 nm**	**McMullen**
20:45	**160P**	**171° @ 35 nm**	**McMullen**
20:48	**47P**	**In Air**	
21:02	**47P**	**110° @ 52 nm**	**Bee**
21:04	**47P**	**112° @ 50 nm**	**Bee**
21:06	**160P**	**117° @ 38 nm**	**Bee**
21:08	**160P**	**116° @ 38 nm**	**Bee**
21:08	**47P**	**109° @ 50 nm**	**Bee**
21:09	**160P**	**117° @ 38 nm**	**Bee**
21:16	**47P**	**286° @ 57.0 nm**	**Bee**
21:24	**160P**	**Landed**	
21:48	**47P**	**Landed**	

Seeding operations were conducted in Bee(30+12H) and McMullen (4+0H) Counties. 34 flares plus 12 hygroscopic flares were burned within 7 clouds. This is the 4th day for seeding in August and the 22nd day for seeding during the season.