

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – April 30, 2025

Synoptic/Mesoscale Conditions:

A lone supercell has formed in a warm, moist, and largely uncapped environment over South Texas. Due to limited large-scale forcing, storm development is expected to stay fairly isolated. Still, with MLCAPE values near 3000 J/kg and a straight, elongated wind profile as shown by the EWX VWP, conditions remain favorable for one or two sustained supercells. These storms could produce large hail and localized damaging winds. This potential should continue for the next couple of hours until surface cooling leads to a more stable boundary layer.

Lifting Mechanism: Dryline

Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	4287	-15°C Height (m)	6380
Precipitable Water (inches)	1.29	CAPE (J/Kg)	1428
LCL (m)	842	CINH (J/Kg)	312
CCL (m)	1092	LI(°C)	-4.5
DRT ICA	-2.02	PB	4
Cloud Base (meters)	1875	CRP ICA	-
Warm Cloud Depth (meters)	2412	Cloud Base Temp (°C)	19.4

Discussion:

Visible satellite denoted cumulus development on Frio/Atascosa County line area. Pilot notified at 2130Z to head to the airport. Pilot launched at 2216Z and headed west towards Pleasanton. However, the cell became severe warned by the National Weather Service. Pilot then headed south to north/northwest McMullen County where more cumulus were visible on satellite. Upon arrival the cell became visible on radar. Pilot then found good inflow and burned 2 glaciogenic flares into cell 534. Pilot then burned 2 glaciogenic and 1 hygroscopic flare into cell 534. Cell now on southern Atascosa/northern McMullen border. Pilot now heading south of the storm. Upon arrival cells were all within a severe thunderstorm warning. Pilot RTB 2355Z.

Watches/Warnings: Severe Thunderstorm Warnings Bexar, Atascosa, Wilson, Karnes Counties.

Seeded Cell ID's:

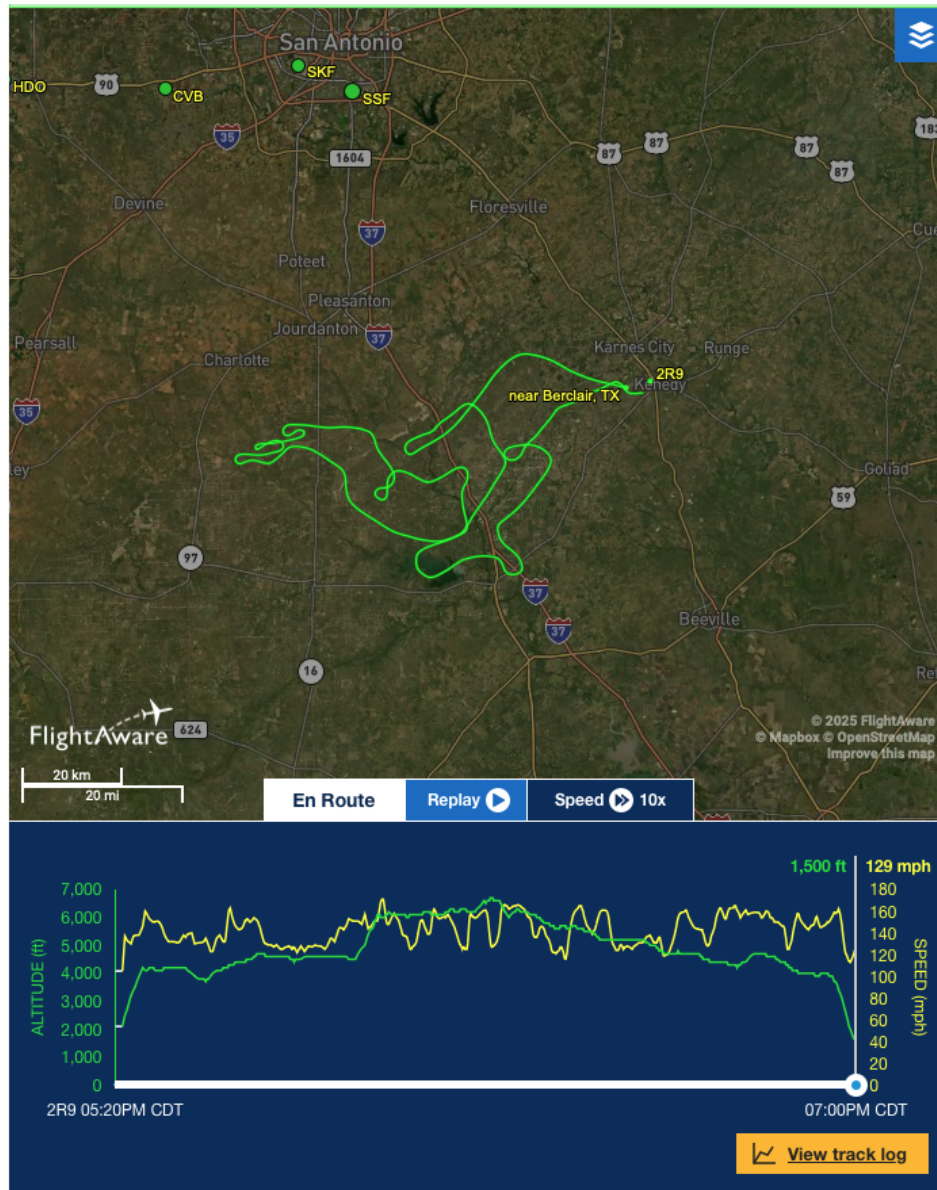
534									
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Flight Information:

TIME (Z)	Plane	Flare Location	County
2220	60P	In Air	
2300	60P	172x23	McMullen
2312	60P	178x19	McMullen
2355	60P	RTB	

Seeding operations were conducted over McMullen County (3G+1H). 3 glaciogenic flares and 1 hygroscopic flare were burned within 1 cloud. This is the 1st day for seeding in April and the 3rd day for seeding during the season.

**** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl ****



Flight 1 60P