WEST TEXAS WEATHER MODIFICATION ASSOCIATION – SAN ANGELO, TEXAS

SEEDING REPORT – July 1, 2018

SYNOPTIC/MESOSCALE CONDITIONS:
Southwesterly flow aloft remains in place across the region. With residual outflow boundaries and temperatures in the low 100's, we could see strong destabilization of the atmosphere later this afternoon and evening. Storms will be centered over areas like yesterday, mainly along and east of a San Angelo to Mertzon to Sterling City area. Storms will have little surface support, so they'll likely be isolated in nature and somewhat short lived.

LIFTING MECHANISM:
Strong Moisture Advection

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4832	-15°C Height (m)	7340
Precipitable Water (inches)	1.11	CAPE (J/Kg)	46
LCL	1477	CINH (J/Kg)	458
CCL	4069	LI(°C)	0
MAF ICA	0.06	PB	0
Cloud Base (meters)	2994	DRT ICA	-1.8
Warm Cloud Depth (meters)	1838	Cloud Base Temp (°C)	8.8

DISCUSSION:
At 2015Z, a few showers were trying to fire north of San Angelo within Coke County and further west in Reagan County. Both quickly dissipated but sat imagery was looking more favorable. Pilot was put on standby and then called to office at 2045Z. We'll try to get airborne before 2130Z and head into Irion/Tom Green Counties where extensive cu were building. Pilot got airborne at 2130Z and headed to the NW where a few showers were ongoing. Much of the activity was pulsating in nature, but if we can hit a storm or two just right we may get something brewing. Frist cell was seeded at 2152Z near the Irion/TG Border near Highway 87. We'll stick with this cell first and then dive south and hit other cells. Looks like we'll have development as far south as Eldorado. Second target is in north central Irion County, storm #422. This cell rapidly developed on us and we had to try to get a lot of AgI out for some hail suppression. Problem is, not much inflow. We did our best into 2220Z trying to identify inflow. This cell finally started to calm down, so we decided to dive a bit further south towards another stronger storm. Meanwhile, further south into Crockett and Schleicher Counties, storms were very short lived as they were displaced from the outflow boundaries. These are working off pure convection only. Still, we will target them soon. Still, we are having a lot of trouble identifying inflow, likely due to the fact these are mostly driven by upper level divergence and no real surface feature. Seeded storms to the north popped off an outflow boundary to the south where new storms were firing up. The northern storms were now outflow dominate so we'll keep our focus on the development to the south. Meanwhile, good activity was taking place in Sterling County. However, with only 1 pilot available, we are unable to intercept. Fortunately, this cell was not well organized and didn't hang around too long. Storms to the south in Irion County were providing some decent inflow. We finally had some long-lived inflow allowing us to utilize a hygroscopic flare. We'll see how it responds. Storm held together well into the 23Z, but bases became rain filled. We'll head east towards Mertzon and get ahead of another larger cell which has merged with several smaller cells. At this point, everything south of highway 87 was very marginal and not seedable as well as everything north of 87. Storms in the western half of Irion County are either rain filled, or outflow dominate. This may be our last target, but we'll see if anything pops up.

Overall trend is downward at the moment. Cell #520 near Mertzon was seeded sufficiently into the 2320Z hour. However, outflow boundary popped off of this and inflow was becoming hard to find as bases were becoming rain filled. Pilot was getting low on flares and with heating winding down, storms were beginning to dissipate. We may RTB soon. Interesting to see that all of the smaller cells seeded have now lumped into two massive storms, TITAN track #'s 422 and 520. At 2330Z, these cells were outflow dominate with no defined bases. So we decided to go ahead and RTB.

WATCHES/WARNINGS:

SEEDED CELL ID'S:

453	422	581	591	520							

FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
2130	**24P**	IN AIR	
2152	**24P**	297° @ 21 nm	**Tom Green**
2153	**24P**	297° @ 21 nm	**Tom Green**
2154	**24P**	291° @ 21 nm	**Irion**
2157	**24P**	292° @ 21 nm	**Irion**
2208	**24P**	270° @ 24 nm	**Irion**
2213	**24P**	270° @ 24 nm	**Irion**
2215	**24P**	267° @ 23 nm	**Irion**
2223	**24P**	259° @ 28 nm	**Irion**
2227	**24P**	263° @ 27 nm	**Irion**
2233	**24P**	261° @ 23 nm	**Irion**
2251	**24P**	242° @ 35 nm	**Irion**
2253	**24P**	248° @ 35 nm	**Irion**
2256	**24P**	304° @ 32 nm	**Irion**
2258	**24P**	305° @ 30 nm	**Irion**
2313	**24P**	304° @ 32 nm	**Irion**
2315	**24P**	305° @ 30 nm	**Irion**
2318	**24P**	304° @ 32 nm	**Irion**
2330	**24P**	RTB	

Seeding operations were conducted over Tom Green (4) and Irion (32+1H) Counties. 36 flares plus 1 hygroscopic flare were burned within 5 clouds. This is the 1st day for seeding in July and the 10th day for seeding during the season.