

**TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS/BARSTOW, TEXAS**

**SEEDING REPORT - September 24, 2017**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Potent upper level trough remains in place over much of the western half of Texas. This will work in conjunction with sufficient surface moisture and several rounds of vort maxes to develop numerous showers and storms once again today. Over the Concho Valley, extensive cloud coverage should keep temperatures cool enough to prevent convection. However, further west across the Trans-Pecos, some clearing will allow for temperatures to push into the mid to upper 80's. This will result in shower/storm development at peak heating going into the evening hours.

**LIFTING MECHANISM:**

Sufficient Surface Heating, Cold Front

**THERMODYNAMIC INDICES (12Z KMAF)**

Freezing Level (m)	4734	CAPE (J/Kg)	184
Precipitable Water (inches)	1.54	CINH (J/Kg)	125
LCL	1135	LI(°C)	-1.5
CCL	1679	PB	2
MAF ICA	-4.96	DRT ICA	-
Cloud Base (meters)	2115	Cloud Base Temp (°C)	13
Warm Cloud Depth (meters)	2619		

**DISCUSSION:**

YESTERDAY'S CONVECTION WAS ACCOMPANIED BY SEVERE AND/OR FLOOD WARNINGS PREVENTING OPERATIONS FROM TAKING PLACE. TODAY, THE SEVERE WEATHER THREAT IS NOT EXPECTED TO BE PRESENT, BUT WE COULD STILL SEE ISSUES WITH POSSIBLE FLOOD WARINGS. DESPITE THAT, OPERATIONS ARE EXPECTED TO TAKE PLACE THIS AFTERNOON AS STORMS ARE EXPECTED TO DEVELOP WITHIN A FAVORABLE AIR MASS WITH SUPPORTIVE UPPER LEVEL DYNAMICS. 18Z ANALYSIS SHOWED A ROBUST CU FIELD TRYING TO DEVELOP NEAR THE REEVES/PECOS COUNTY BORDER. HOWEVER, TEMPERATURES WERE STILL IN THE LOW 80'S ACROSS THE REGION WHICH IS PREVENTING THESE CLOUDS FROM RAPIDLY DEVELOPING. PILOT WAS CALLED AIRBORNE AT 1920Z TO HEAD DUE SOUTH OF PECOS WHERE STORMS WERE DEVELOPING. STILL, TEMPERATURES WERE COOLER IN THE LOW TO MID 80'S, BUT CONVECTION APPEARED TO BE TAKING OFF. PILOT ARRIVED TO CELL AND BEGAN SEEDING AT 2003Z WHERE HE FOUND FEW SPOTS OF INFLOW WITHIN STORM #3482. PILOT PUT OUT 8 FLARES IN THIS AREA AND CONTINUED INVESTIGATING INTO THE 2020Z HOUR. MEANWHILE, MORE DEVELOPMENT WAS ONGOING IN WARD COUNTY, BUT THESE WERE MORE IN TERMS OF SHOWER ACTIVITY THEN CONVECTIVE. IT SEEMS THE MOUNTAINS ARE PROVIDING ADDITIONAL LIFT MEANING THE STORMS FURTHER SOUTH HAVE MOST POTENTIAL. PILOT CONTINUED TO WORK THIS AREA BEFORE MOVING A BIT FURTHER EAST. RADAR RESPONSE WAS EVIDENT, WITH STORM STRUCTURE BECOMING MORE DEFINED AND DBZ SPIKING. IT APPEARS WE DID SOME GOOD WITH STORM #3482. OUR FOCUS HAS NOW SHIFTED EAST ON STORM #3506. THIS CELL HOWEVER DID NOT HAVE INFLOW AND WAS TOUGH TO NAVIGATE DUE TO LIMITED VISIBILITIES/VIRGA. THEREFORE, PILOT WENT BACK TO CELL #3482 AND SEEDED INTO THE 21Z HOUR. WE'LL TAKE ANOTHER LOOK AT THIS CELL BEFORE MOVING ON. WITH STORM APPROACHING PEQ, WE'LL RTB FOR FUEL/FLARES AND RELAUNCH IF NEEDED.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

3482								
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
1940	26P	IN AIR	
2003	26P	170° @ 26 nm	Reeves

2008	26P	170° @ 26 nm	Reeves
2011	26P	170° @ 26 nm	Reeves
2014	26P	170° @ 26 nm	Reeves
2020	26P	170° @ 26 nm	Reeves
2048	26P	170° @ 17 nm	Reeves
2050	26P	170° @ 17 nm	Reeves
2059	26P	170° @ 16 nm	Reeves
2101	26P	170° @ 16 nm	Reeves
2105	26P	RTB	

Seeding operations were conducted over Reeves (20) County. 20 flares were burned within 1 cloud. This is the 1<sup>st</sup> day for seeding in September and the 9<sup>th</sup> day for seeding during the season.