

WESTERN KANSAS WEATHER MODIFICATION PROGRAM

P.O. BOX 254 Lakin, KS 67860

Lakin Office: 620-355-6913

waltergeiger@yahoo.com

Internet: www.gmd1.org/index-3.html

WEEKLY NEWSLETTER

No. 2015-01

For the period April 16 – April 24, 2015

NOTE 1: Any person, group, newspaper or entity not receiving this newsletter and wishes to receive it by email, or if you are getting it and wish to discontinue, or if you have an address change, please respond to us using one of the above contact points.

General Interest: The Western Kansas Weather Modification Program (WKWMP) started its 41st consecutive season of operations this week. The program will operate for roughly five months this year, April 16th through September 15th. The program's objectives remain unchanged: to reduce hail and optimize rainfall over a portion of western and southwestern Kansas. The sources of funding this year are from participating counties and Groundwater Management Districts in Scott City and Garden City. Western Kansas Groundwater Management District #1 in Scott City is the WKWMP administrator who owns all the equipment and hires the personnel. This year, one cloud-base and one cloud-top plane will serve as the primary aircraft while an additional cloud-base plane will be on reserve status to be utilized on days when numerous severe storms are expected. The target area consists of three participating counties: Scott, Kearny, and Lane.

Walt Geiger, Program Meteorologist (14th year) will direct seeding operations from the operations office at the Kearny County Airport. WKWMP Pilots-In-Command this year include Kyle Spencer out of Scott City and Scott Bryant out of Lakin. Kyle Spencer (29th year), our Program Manager and Chief Pilot will be flying cloud-base or cloud-top depending on forecasted storm severity and flight conditions. Scott Bryant (9th year) will fly cloud-base. Weston Thompson out of Scott City will occasionally serve as a stand-in pilot or command a third plane depending on forecasted storm severity.

Weather: The period started out somewhat cool with cloudy conditions along with isolated strong to severe storms Thursday and Friday. Unseasonably cooler days, near freezing nights and scattered light rain and drizzle were noted Saturday through Monday. Continued cool temperatures persisted with partly cloudy skies through Wednesday. A severe storm moved across portions of the target area Thursday evening containing large hail on funnel clouds. Multiple tornados and funnel clouds occurred on a storm during Friday evening over Wichita and Scott counties. Although the environment was not particularly favorable for widespread severe weather in our area, dynamical conditions were favorable for low-end tornadoes. Seeding was terminated over northern Scott and southern Scott at 6:10 as the updrafts became washed out due to a gust front undercutting the storm cores. As a result of the undercutting, the hail cores also diminished.

Operations: There were four operational days this period.

April 16th, Program Operations Day #1

One plane was launched at 1:21 p.m. to investigate a small storm traveling north-northeast over eastern Wichita County. Radar indicated the potential for small hail. A brief period of seeding for hail suppression began at 2:33 and ended at 2:45 over southeastern Wichita County on a small storm traveling north-northeast towards northwestern Scott County. Later, the plane moved to investigate a severe storm over the western half of Finney

moving towards Lane. A patrol was performed on this cloud for awhile before breaking off at 3:50 as the storm began to decay. There being no other storms of interest, the plane turned for base at 3:55.

April 17th, Program Operations Day #2

Two planes were launched at 3:33 p.m. to investigate a little storm that quickly developed just south of Friend traveling north. Radar indicated this cloud was producing a localized area of moderate to heavy rain but was intensifying further. Planes patrolled mainly southern Scott County for awhile before returning to base around 5:00. Two aircraft were launched at 5:35 p.m. to a large storm over eastern Finney traveling north. Radar indicated this cloud was capable of moderate to large hail. Seeding for hail suppression began at 6:03 over northern Finney. Seeding continued as the storm passed into southeastern Lane by 5:58. The storm began taking a right turn to the east around 6:11. There were a few instances where funnels along with perhaps one brief tornado occurred on this storm. Seeding was terminated at 6:30 along the Lane/Ness border. The storm exited the target area into Ness County at 7:00

April 23rd, Program Operations Day #3

Two planes were launched at 7:45 p.m. to intercept a severe storm traveling east through Hamilton County. Radar and ground reports indicated golf ball hail. The storm was also rotating via radar data. Intense seeding for hail suppression began at 8:10 near Syracuse. The storm crossed into extreme western Kearny near Kendall at 8:40. Seeding continued near Lakin at 9:12. The storm was nearing the eastern target boundary by 9:20 at which time seeding stopped. Several reports for hail were posted on this storm ranging from 1.00 inch to 1.75 inch along with wall cloud and funnel reports.

April 24th, Program Operations Day #4

One plane was launched at 4:00 p.m. to investigate a slow northeast moving storm along the Kearny/Grant border. The plane patrolled two areas for a time, the first area south of Lakin and the second area over southern Wichita County. The southern Kearny storm had de-intensified somewhat while the Wichita cloud developed into a severe hail storm by 4:45. Seeding for hail suppression began at 5:00 over southeastern Wichita County as this storm traveled east. A stovepipe type tornado was noted about 3-miles east of the parent storm over southeastern Wichita. Radar also indicated some storm rotation along with a small hook echo on the southeastern storm flank. The eastern edge of the mini-supercell passed into western Scott at 5:11. The storm produced another tornado at 5:12. Pilot reports confirmed several more funnel/small brief tornados along the active eastern edge of this cloud as it moved through western Scott County. Seeding was terminated over northern Scott and southern Scott at 6:10 as the updrafts became washed out due to a gust front undercutting the storm cores. As a result of the undercutting, the hail cores also diminished.

Walter Geiger, Meteorologist
Western Kansas Weather Modification Program