Woodward Tornado of April 9, 1947

This tornado was considered to be the longest, widest, and most destructive ever to have occurred in this section of the country. The tornado ripped through three States in a 221 mile long path, leaving in its wake 169 killed, 980 injured, and a property damage of about $9,700,000.

The tornado originated about 5:42 p. m., CST, April 9, 1947, 1-2 mile SE of White Deer, Texas. The storm moved northeastward, passing 5 mi. NW of Pampa at 6:05 p. m., 3 mi. NW of Canadian, through Glazier, about 7:22 p. m., and through Higgins, about 7:45 p. m. It entered Ellis Co., Oklahoma, about 8:00 p. m., following a path which took it 4 mi. SE of Shattuck, 4 mi. NW of Arnett, 3 mi. SE of Gage at 8:13 p. m., and 2 miles SE of Fargo. Moving into Woodward Co., the storm struck Woodward at 8:43 p. m. From Woodward the tornado continued its northeastward course through Woodward and Woods Counties, finally leaving Oklahoma about 10:00 p. m., not far from Hartner, Kansas. Between 10:00 p. m. and 11:00 p. m., CST, the tornado passed through Barber Co., Kansas, and into Kingman Co., where it dissipated after causing some damage at St. Leo, 6 miles north of Nashville, Kansas. The rate of forward movement was 42 mi. per hr. The width of the path was 250 yds. near White Deer, 1.5 mi. at Higgins, 1.8 mi. at Woodward, and 1.0 mi. from Woods Co. to the point of dissipation.

The area affected by the tornado, during the period prior to the onset of the storm, was in the apex of the warm sector of a low-pressure system centered in southeastern Colorado at 6:30 p. m., CST, April 9; the center moving to near Wichita by 12:30 a. m., April 10. On the 6:30 p. m. map, a cold front was indicated as extending SSW from the center along the western edge of the Texas Panhandle. By midnight the front had moved eastward, and was indicated as a cold front aloft through central Kansas, through Enid, Okla., just west of Fort Sill, and to a point south of Big Spring, Texas. Southerly, gusty surface winds, 30-40 mph, with low clouds were noted in the area. Winds aloft at Amarillo at 4:00 p. m. were southerly from 53 to 61 mph. at levels from 4 to 7 thousand feet MSL.

Few reports were received from persons actually observing the tornado cloud due to fog, low clouds, and darkness. Observers saw the tornado as it formed near White Deer, and the Weather Bureau observer at Pampa noted the cloud when it was north of his station. The roar of the tornado as it passed 3-5 mi. to the south could be heard at the Gage station. Near Gage the funnel shaped cloud was seen during lightning flashes. The tornado caused marked dips in the barograph traces at both Pampa and Gage. The cooperative observer at Arnett, 4 mi. to the south of the storm path, heard the tornado roaring but was unable to see it because of the low clouds. Observers at Woodward reported hearing the tornado, comparing its sound to the roar of a fast freight or express train.

Loss of life totaled 169; 101 being killed in Oklahoma and 68 in Texas. According to the American Red Bross 95 persons lost their lives at Woodward and 6 in Ellis Co. In Glazier, 17 were killed and in Higgins 51. 782 injured were counted in Oklahoma, and 198 in Texas. The Red Cross reported a total of 626 houses destroyed and 920 damaged as follows: Oklahoma, Woodward Co., 430 destroyed, 650 damaged; Ellis Co., 52 destroyed, 133 damaged; Woods Co., 25 destroyed, 20 damaged; Texas: Lipscomb Co., 83 destroyed, 116 damaged; Hemphill Co., 36 destroyed and 1 damaged.

The tornado struck Woodward in the early part of the night when numerous families or members of families were away from home. Many returned to find their homes completely destroyed or badly damaged. Some families, like that of the local Weather Observer, escaped injury by taking refuge in their storm cellars. Miraculous escapes were many, while in other cases most if not all members of the family were either killed or injured. Confusion among separated families was rampant. Weather conditions added to the misery of the homeless and the task of relief workers as temperatures dropped into the 30s and 40s and cold rain changed to snow on the 12th and 13th.

Total property damage for the three States was estimated at $9,700,000. Losses to property were principally to buildings, although many livestock, fences, telegraph wires, automobiles, and farm machinery were destroyed. Damage estimates by County Agents in Oklahoma were: Woodward Co., $6,608,750; Ellis Co., $1,264,000; and Woods Co., $150,000; making the total loss in Oklahoma around $8,022,750. Total property damage was estimated at $1,505,000 in Texas, and $200,000 in Kansas.

Fires broke out in a number of places, and were difficult to control due to loss of water supply and lack of help. Persons were mostly concerned with taking care of the dead and injured. A downpour of rain for about 15 minutes shortly after the storm moved on, helped suppress the fires at Woodward. The tornado destroyed the equipment for the local weather station, but the amount of rainfall was estimated by the observer at 0.50 inch. Rain and snow on the 12-13th added to damage of property remaining unprotected.

In Woodward over a hundred city blocks were demolished. Practically all of Higgins and Glazier were destroyed. For the entire storm between 4,000 and 5,000 buildings of all kinds, including homes, were either destroyed or damaged.

Weather Bureau Officials, Messrs. Lloyd, Schaad, and Winburn, who investigated the tornado, indicated that the path of the tornado at Woodward measured 1.8 mi. wide, one of the widest tornado paths of record. Measurements of the distance from the right hand edge of the tornado, where structural damage began, to the center of the core of the tornado was 1.1 mi. From the center of the core to the left hand edge of the zone of destruction was determined at 0.7 mi. On the extreme right hand edge of the zone of destruction the debris lay almost parallel to the path of the tornado. Moving in toward the center of the core, directly across the path of the tornado, the angle at which the debris lay gradually shifted, as the forward ends of trees, boards, etc., were inclined more to the left. At the right hand edge of the core the debris lay due north-south; and in the core itself, the debris was in a tangled mass with the bulk of it at right angles or nearly right angles to the path. (M-O.A.)