THE OAK LAWN TORNADO

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On Friday afternoon, no less than ten tornadoes occurred in northeast Illinois. This report concerns itself with the last and most destructive of that afternoon, the Oak Lawn Tornado. At the time of this writing, 32 people have been killed in this storm and property damage is over 40 million dollars.

The Oak Lawn tornado developed as did the other nine on a very active line of thunderstorms. This line developed around 8 AM CST in western Iowa and northeast Kansas and moved to northeast Illinois by late Friday afternoon. There was widespread severe weather with this line throughout Iowa, Missouri, Illinois, northwest Indiana, and southwest Lower Michigan.

It appears that the Oak Lawn tornado originated on the southwest side of an intense thunderstorm cell. This cell was first indicated on radar at 4:45 PM CST about 18 miles west-northwest of Joliet, Illinois.

At approximately 5:15 PM CST, an off-duty Weather Bureau employee observed a rotating mass of clouds over his home at a point 10 miles north of Joliet at the intersection of U.S. Route 53 (Joliet Road) and Naperville Road. At this point, a home barometer was observed to drop .60 of an inch in ten minutes. At approximately 5:18 PM CST, a restaurant at the intersection of McCarthy Road and 127th Street, approximately 5½ miles east-northeast of this point had their windows blown out. Up to this point, there is no report of a funnel.

About 5:24 PM CST, a Mr. Lace at the Little Red School House located at 99th Street and Willow Springs Road (10400 W.) observed a pointed rotating cloud going almost directly east. It was passing just south of his point of observation and the cloud seemed to be going lower. He said as the cloud passed, "My ears popped, the building shook, and cars in the parking lot bounced." He said, "Three-quarter inch hail preceded the cloud and the cloud was moving rapidly. Then the pressure lowered to 29.60." His call to the Weather Bureau was the first indication of the impending tornado. Unfortunately, the Weather Bureau employee was unable to get through to call in his report; he was unable to get a dial tone.

Several witnesses now reported they saw a funnel cloud not touching the ground pass U.S. 45 (9600 W.) and Kean Ave (9200 W.) just south of 107th Street. The cloud gradually lowered as it moved east-northeastward then touched down just east of 88th Avenue between 105th and 106th streets. The time of touchdown according to witnesses was at 5:24 PM CST. They describe the cloud as a rotating gray-green mass until just east of 88th Avenue where it turned black. The ground was torn up at this point for a new housing development and they said they could see the mud being spun around. Small trees were uprooted and the underbrush flattened from a point at about 108th Street and Kean Avenue to just east of 88th Avenue between 105th and 106th streets. Three power poles were shoved to the east but not toppled on the east side of 88th Avenue. This seems to substantiate the report of the observers that at this point, the tornado came in contact with the ground.

The point of tornado touchdown is along a dry creek and one of the lowest spots in the area. The tornado then moved out across the open fields destroying a few trees. Its first contact with buildings was the half block section of 83rd Avenue just south of 103rd Street where three homes, one a brick and two frame, were destroyed. The tornado then crossed 103rd Street

between 82nd Avenue and 82nd Court and moved east-northeastward crossing Roberts Road (80th Avenue) between 101st and 102nd Streets and 5:26 PM CST. It then moved to 78th Avenue between 100th and 101st Streets rotating a house off its foundation. The tornado was from ½ to ¾ city blocks wide, approximately 350-450 feet wide. A few homes were destroyed and at least 10 heavily damaged trees were snapped off and lying toward the east in this area.

From here the tornado, still on the ground, moved out across the open fields but not before taking two high transmissions towers just east of 78th Avenue. Up to this point, witnesses said there was a blinding rainstorm, then ping pong or golf ball size hail, then the tornado, all occurring in rapid succession.

The tornado crossed the Tri-State Tollway and came into a well established area of homes on the east side of Harlem Avenue between 98th and 99th Streets, where it tossed a well built house 60 feet from its foundation and on its side. It extensively damaged several homes and destroyed two in the area from here to 98th Street and Sayre Avenue, its path about ½ block wide through here. Crossing the Belt Line R. R. tracks, the tornado passed through an older section of Chicago Ridge inflicting severe damage. The tornado then hit the Starlite Drive-In Theatre between 96th and 97th Streets just west of Ridgeland Avenue (6400 W.). The theatre's screen steel supports were bent over by the winds and the speakers and speaker stands were blown out of the ground and to the east. The tornado continued on an east-northeastward path into central Oak Lawn where it took the greatest total of life and did the most severe damage. From approximately Austin Avenue (6000 W.) and 96th Street to 91st Street and Kenton Avenue (4600 W.), the tornado path was at its widest varying between ¾ and 1 city block wide. This was a heavily built up area of both older homes and brand new brick tri-levels and bi-levels. The damage was terrific to all types of homes. Many all brick homes were leveled in this section.

At the main intersection of Southwest Highway and 95th Street, a tavern, restaurant, motel, food market, and two gas stations were leveled. Between 25 and 40 automobiles, halted at this intersection for a traffic light, were thrown in all directions, some carried northeast at least a block and set down on the Oak Lawn athletic field. The south end and part of the east wall of the high school was taken out at 5:28 PM CST according to the school clock. The Southwest Suburban Bus Lines garage was heavily damaged and buses were thrown to the east for a half block, one landing on the roof of a house.

There appeared to be a narrowing of the path to about ½ block wide and damage became less in the two blocks on either side of Laramie Avenue (5200 W.) and Southwest Highway. But again, the path becomes wider and the destruction greater as the storm approached Cicero Avenue (4800 W.). There was heavy damage on Cicero Avenue between 91st Place and Southwest Highway. A trailer court and a roller rink on the east side of Cicero at 92nd Street were destroyed with loss of life.

The storm path continued between ½ to 1 block wide as it crossed Hometown, a post World War II community of mostly frame homes and duplexes. Many homes were destroyed but luckily with no loss of life. The tornado again crossed Southwest Highway at Duffey Avenue damaging the Hometown City Hall and stopping clocks there at 5:29 PM CST. The path narrowed to 250 to 300 feet as it crossed Main, then Komensky Avenue at 89th Place, then at 8900 Crawford Avenue (4000 W.), a duplex was leveled and others badly damaged.

The tornado leveled a steel fence on the east side of Crawford Avenue and crossed St. Marys' Cemetery, knocking over more than 200 monuments. It leveled trees and heavily damaged a 2-story brick structure at the east end of the cemetery alongside the tracks of the Great Western Railroad. It then moved through Evergreen Cemetery and severely damaged

buildings on Kedzie Avenue for a half block south from 88th Street in Evergreen Park. There was heavy damage, walls down, roofs out and other structural damage from this point across the intersection of 88th Street and Richmond to Francisco Avenue just north of 88th Street. Damage was lighter with mostly broken windows and some roof damage and also the path narrowed from here to Fairfield Avenue. Once again, damage got heavier and the path widened to ½ to ¾ blocks with a few homes destroyed and many homes and small stores badly damaged in the area from Washtenan Avenue (2700 W.) to the Baltimore and Ohio Railroad tracks, from 87th Street to ½ to ¾ of a block south of 87th Street. Many people through this portion of Evergreen Park saw the tornado coming and were able to seek shelter in their basements.

The tornado continued a little north of east along 87th Street, reaching Western Avenue (2400 W.) at 5:32 PM CST as it passed through the grounds of the Beverly Hills Country Club. It sheared off numerous trees at their base, and destroyed a brick shelter and two cards on the north side of 87th Street at about 2500 West. The tornado crossed Western Avenue, tearing down trees through the Dan Ryan Woods. It again hit a populated area at 87th Street and Damen Avenue (2000 W.), damaging roofs and breaking many windows. From 87th and Damen Avenue to 86th Street and Paulina Streets (1700 W.), the path narrowed to only a half block wide and the tornado was not always in contact with the ground. The path was marked by large trees down, roof damage, broken windows, and a few garages destroyed.

The damage became heavier again from 86th and Paulina to 86th and Laflin Streets (1500 W.). Many apartment houses and bungalows in this area had their roofs removed and parts of their walls blown down. Windows were blown out and signs damaged all along Ashland Avenue from 85th to 87th Streets. Except for two badly damaged homes at 86th and Bishop Streets, there was only slight damage from 86th and Laflin Streets (1500 W.) to 86th and Green Streets (830

W.). The tornado moved almost due east through here with a path no wider than 200 feet. The tornado through this area again seemed to not always be in contact with the ground.

On crossing Halstead Street between Vincennes Avenue and the railroad tracks, the damage again becomes heavier. At Court and Vincennes Avenues, two flat buildings lost their walls, and at 85th and Wallace Streets, a complex of new apartments had their roofs and portions of their top walls blown off. The tornado moved east-northeastward again when it crossed the railroad yards. There it blew out portions of the metal walls and roof of the Bethlehem Steel Company on Stewart Avenue at 85th Street. A large brick factory building at the southwest corner of 84th Street and Wentworth Avenue had its north and east walls blown out. The tornado path again widened to ³/₄ of a block as it moved through an area of newer homes and small apartment buildings from 84th and Wentworth to the 8300 block on State Street (0 W.). Damage was heavy here with several homes destroyed and many badly damaged. As the tornado crossed the Dan Ryan Expressway at 5:35 PM CST, it flipped over a semi trailer truck and dropped so much debris on the expressway, that it was closed for several hours.

The damage was generally light from 83rd and Wabash eastward across 83rd and South Park. This is an area of homes and damage was confined to roofs, windows, and chimneys. At 83rd and South Park, three service stations were heavily damaged. From 83rd and South Park, the tornado moved mainly eastward crossing Cottage Grove Avenue in the 8200 block and moved across the intersection of 82nd Street and Dobson Avenue to the Illinois Central Railroad tracks. This is an area of 3 and 4 story yellow and brown brick apartment houses and hundreds of windows were blown out and many large trees snapped off. Roofs were blown off several buildings and a few brick walls were blown out, and some garages leveled; but there was no total

destruction as was further west. The path seemed to be about a block wide here but difficult to pin down.

The tornado moved from the Illinois Central tracks generally at tree top level according to some eyewitnesses, from 81st Place and Woodlawn (1200 E.) across Yates (2400 E.) just south of 79th Street and then to 78th Street and Lake Michigan. This is an area of mainly single family homes and bungalows, although there were some large apartment buildings on Yates, Jefferey Avenue, 79th Street and near Lake Michigan. Again the damage was mainly to roofs and chimneys. Many windows were broken, bricks knocked off the tops of buildings and large shade trees snapped off. There were no examples of complete destruction. An interesting fact here and over the whole path from 83rd and Michigan Streets to 78th and the lake is the widespread minor damage which fans out for 3 to 4 blocks south of the main path. So that there are roofs damaged, windows broken and trees pulled down in the whole area from 80th to 85th and Michigan on the west to 78th to 81st and the lake on the east.

The tornado passed over the Filtration Plant at 78th and the lake at 5:39 PM CST. At this point, a Bendix Friez recording aerovane 100 feet above the ground recorded a 100 MPH plus wind speed (top of the scale) from a 360 direction. Direction then changed. Windshields were popped on automobiles parked at the plant.

In 15 minutes, the tornado traveled 16.2 miles at a speed of better than 60 miles per hour. Its path was generally ½ to ¾ city blocks (300 to 500 feet) wide. Its direction of movement, generally 250°. The tornado changed directions at two places. It traveled from about 240° from its point of touchdown to 95th Street and Southwest Highway in Oak Lawn, then moved at about 260° to 86th and Halstead Streets. It assumed a 240° direction again from 86th and Halstead

Streets to 83rd and State Streets and a 260° direction from 83rd and State Streets to 78th Street and Lake Michigan.

The tornado was not always at ground level through the entire path. It was from 88th Avenue and 107th Street to 87th Avenue and Western Avenue, a distance of almost 8 miles, then it appeared to be at tree top level for the next 2 miles to Halstead Street. It then touched down hard in the next mile to State Street. Then from State and 83rd to the lake at 78th Street, it seemed to be generally at tree top level for the next 4½ miles.

Where the tornado hit hardest, as in Oak Lawn and Hometown, destruction was complete. Buildings of conventional construction directly in its path were leveled. That an automobile is one of the most unsafe places to be in a tornado was proven by the large number of deaths to motorists.

Of note, also, is the large number of people who took refuge in the southwest corner of their basements. Even those who weren't aware of the warning and were at home, when the tornado was upon them, they moved to this part of the basement or the building if no basement was available. Evidently the Weather Bureau's repeated instructions on this place of refuge during a tornado have paid off.

Again of note is the brilliant electrical display observed just prior to and at the time of the tornado's passage. Continuous lightning, frequently in bright green flashes is the way many described it.

WARNINGS

The April 21st tornado situation stands as an outstanding example of the Weather Bureau's Tornado Warning System. The unfortunately high death toll, no doubt, would have been much higher without the warnings.

The people of Cook County had 24 minutes warning before the Oak Lawn tornado first touched down. The Chicago Weather Bureau Office issued its first warning for McHenry County after a tornado was reported to us over the Civil Defense Telephone Warning Net (NAWAS). This warning was issued at 4 PM CST and gave the people of McHenry County five to ten minutes warning for the tornado which hit in that area.

Warnings were later extended, at 4:30 PM CST, to include eastern Will, southeast Cook, and Lake County, Indiana, on the basis of a report from a tornado spotter, of a tornado near Peotone, Illinois. Then at 5 PM CST, on the basis of radar and surface observer reports of a possible tornado north of Elgin, warnings were extended to DuPage, Kane, and all of Cook counties including the Chicago area.

Citizens in the path of the Oak Lawn tornado had at least 24 minutes warning from the time of the first touchdown at 5:24 PM CST.

From the many interviews we made, we found most people who were at home were aware of the watch and warning from listening to it on the radio. But it was those persons who were not at home, who were coming home from work, who were out to Friday night dinner, who were out to the store to cash their Friday pay check; here was where the high death toll resulted. Most of those killed were people who were not in a position to hear the warnings because they

were away from home. Actually, the tornado could hardly have hit at a worst time of the day or week to catch the greatest number of people out in the open.

Few people were killed in houses and most were either in basements or on their way to the safety of the basement when the funnel hit.