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Introduction:

The worst tornadoes in Twin Cities history occurred on May 6, 1965, with five tornadoes sweeping across the western and northern portions of the 7-county region, and a sixth tornado just outside the metro area. Four tornadoes were rated F4, one was an F3, and the other produced F2 damage. Thirteen people were killed and 683 injured. Many more would have been killed had it not been for the warnings of the U.S. Weather Bureau, local officials, and the outstanding communications by local radio and television stations. Many credit the announcers of WCCO-AM with saving countless lives. It was also the first time in Twin Cities history that civil defense sirens were used for severe weather.

	Tornadoes of May 6, 1965 (as revised in 1973)					
Number	Touchdown Time	Tornado Track	Path Length (miles)	Deaths and Injuries		
1	6:08 p.m.	Touched down just east of Cologne (Carver County). It dissipated in the northwestern portion of Minnetrista (Hennepin County).	13	3 deaths, 175 injuries.		
2	6:27 p.m.	Touched down near Lake Susan in Chanhassen (Carver County). It moved straight north into Deephaven (Hennepin County) and dissipated.	7	No fatalities. Injuries not mentioned.		
3	6:34 p.m.	Touched down 3 miles east of New Auburn (Sibley County). It dissipated just west of Lester Prairie (McLeod County).	16	No fatalities. Injuries not mentioned.		
4	6:43 p.m.	Touched down 2 miles east of Green Isle (Sibley County). It dissipated 2 miles southwest of Waconia (Carver County).	11	1 death, 175 injuries.		
5	7:06 p.m.	Touched down in the southwest corner of Fridley (Anoka County). It dissipated just northeast of Laddie Lake in Blaine (Anoka County).	7	3 deaths, 175 injuries.		
6	8:14 p.m.	Touched down in Golden Valley (Hennepin County). It moved across North Minneapolis, Fridley, Mounds View, then dissipated just west of Centerville (Anoka County).	18	6 deaths, 158 injuries.		

Tornado Photographs:

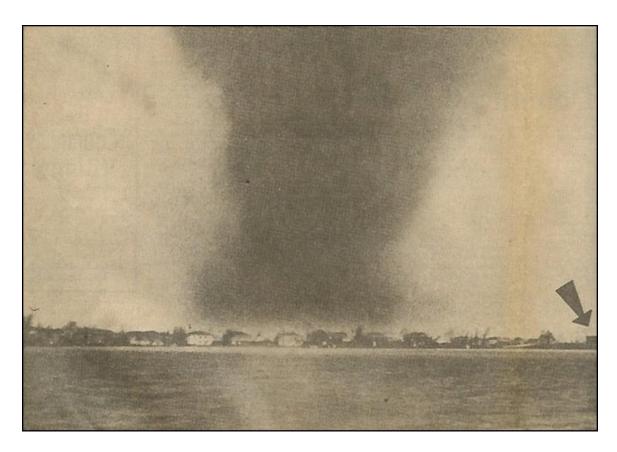
There are three known photographs of the tornadoes - the Hamburg tornado was published in the Young America Times, and both the Deephaven tornado and second Fridley tornado were published in the Minneapolis Tribune. It is unknown whether anybody else took pictures of any of the tornadoes that day. A fourth photo of a tornado may be the Glencoe tornado, but there is too much uncertainty to include here.



Photo copyright Wilmer Wichelmann as scanned from a printed copy of the Norwood-Young America Times provided by Gladys Donnay. The photographer was on the edge of Hamburg, looking west, and believed the tornado was only about one mile away. He could see debris being flung in all directions.



A photo taken by Minnetonka resident H. B. Milligan of a tornado crossing to the west of the junction of Hwy 7 and 101 on May 6, 1965. It is believed that this was the tornado that touched down in Chanhassen at 6:27 p.m. and dissipated in Deephaven at 6:43 pm. The photo was published in July 1965 by the Minneapolis Tribune as part of the "Photos of the Week" feature, and photographers received a \$5 award.



A Minneapolis Tribune Photo (published on the front page of the newspaper on May 7, 1965) of the second Fridley tornado. It was taken by staff photographer John Croft, who had been in Fridley photographing damage from the first tornado.

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Interview with U.S. Weather Bureau Staff Member

Editorial Note: Warning Coordination Meteorologist Todd Krause spoke with Dean Nesley on May 2, 2015. Mr. Nesley was on duty May 6, 1965 and has a vivid memory of many of the events that evening. The interview was transcribed, with minor edits for clarity. Dean assisted in the radar room and performed many duties that historic evening.

"I was the radar operator during the day shift. About 10 in the morning, skies were clear, nothing was on the radar, and we had everything taken care of. I knew it was a day that could be very busy.

By 1:00, we started getting just a little bit of stuff on the radar down by Mankato, then at 3:00, it blossomed. Then in just a half hour, it really expanded. I'll tell you one thing: when the storms started to develop down around Mankato, the radar went from nothing to 30,000 feet in 30 minutes. We told a couple of the forecasters about it. No one was really excited about it, though. By 4:00, though, it was really off and running, coming up the Minnesota River valley.

I had bad news on the radar already, and by 5:00, they brought in Jim Stone, an older guy who was really great on the radar. I think there was one more guy in there. And the phone calls were going crazy. It wasn't very long after, and Jim had one on the radar. I remember going out to into the forecast room and told the forecasters, "hey, we've got a hook out there, and they were a little bit reluctant to do anything, because the siren box had never been used before. And we were all debating whether to turn on the sirens for the cities. The lead forecaster had the responsibility to activate the sirens and was the only one who had access to the key to turn it on. I believe it was Neil Lampi that day. They did activate the sirens.

We were getting reports all the way from Mankato of high winds, but I don't know if there were any touchdowns. Then a tornado did come down by Chanhassen, and we did get a report of a lot of damage. And I was watching over Jim's shoulders, and we were alerting the Highway Patrol downtown, and that it was well on the ground by that time, heading toward Minneapolis.

We didn't know what it meant at the time, but the storms were taking a 30 degree turn to the right. Anyway, we turned the camera down to the 25 mile range, which we rarely did, but at one time, Jim said we had 5 tornadoes on that scope at one time.

We were very, very busy and there were a lot of news reporters in there asking for access to the radar room, and as fast as they would try, we would tell them to get out and say we're sorry.

I stayed until about 1130 pm. We were doing our jobs."

WSR-57 KMSP Radar and the Radar Images:

The weather radar was a WSR-57 with a 10 centimeter wavelength that was installed in the early 1960s. The antenna was located in the northwest section of the MSP airport grounds, near 28th Avenue S and E 62nd Street. If storms were strong enough, it could detect them well into eastern South Dakota, central Iowa, etc., with its range of 250 nautical miles (285 statute miles).

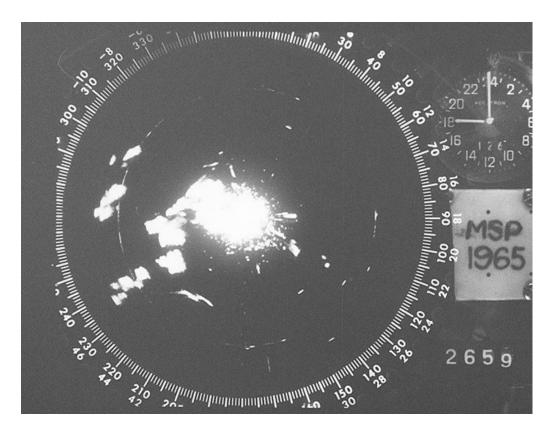


This is a 1980s era photo of the WSR-57 console at the National Weather Service at MSP. By this time, it had a system by which radar echoes were digitally processed. In 1965, however, there was no such digital processing, and one had to apply manual attenuation so that the operator could see some of the finer detail of critical echoes. The radar operator on May 6 was very skilled at this, enabling one to see great detail, including a number of hook echoes.

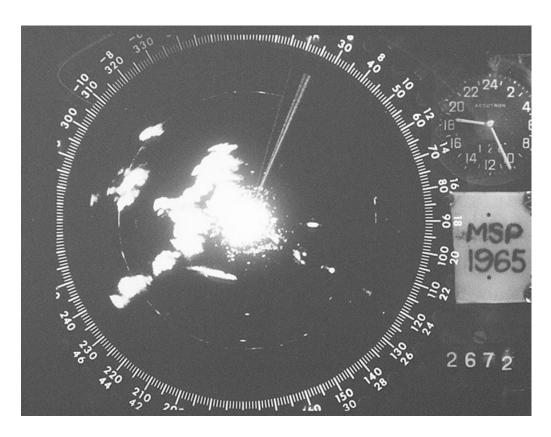
The radar had a camera that could record one image every 15 minutes or as quickly as one per minute. On May 6, the operator had set the camera so that it would typically take a picture about once per minute. One could also adjust the distance that was being viewed by the camera. If storms were close, the radar operator had the option to adjust the camera setting to a radius as close as 25 nautical miles (28 statute miles). On May 6, 1965, the radar operator generally had it set to record photographs out to 50 nautical miles (58 statute miles). The range ring is at 40 nautical miles (46 statute miles). Sometimes the radar operator would stop the radar dish from rotating, thereby allowing one to tilt the antenna up and down and see the vertical structure of the echo. If one did this while the camera was taking its picture, the photograph would look washed out and

might also only show a portion of the echoes in the 360 degree circle. This explains why a few of the photographs are incomplete. Echoes might also look bright white if there was not enough attenuation.

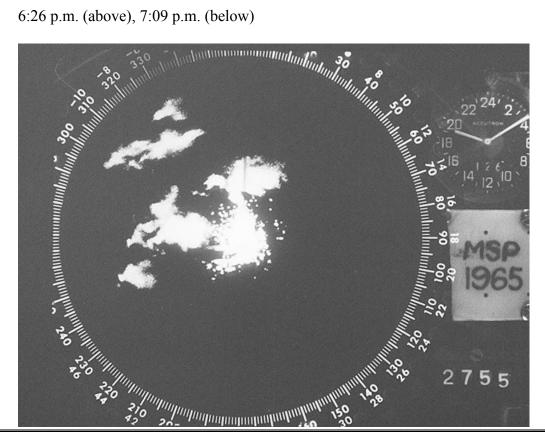
The 35mm film from the radar camera was recently converted to digital format. There had been some digital conversion in 2005, but a much improved conversion was performed in 2015. A sampling of the images is included here. Note that the clock uses 24 hour timing. For example, 1800 would be 6:00 p.m., and 2100 would be 9:00 p.m. Throughout the course of the event, 24 separate hook echoes were noted, as described in Storm Data. From a meteorological perspective, however, we know that not every hook echo has an associated tornado.

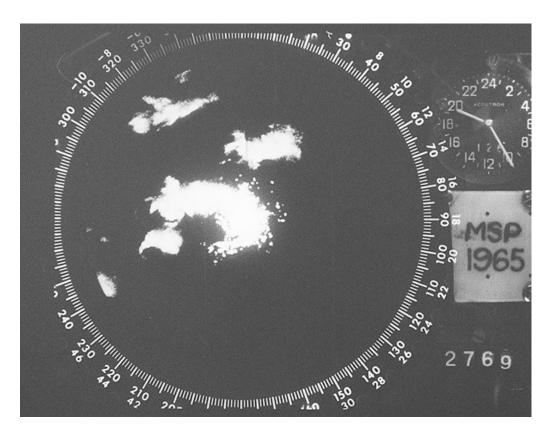


6:00 p.m. (above)

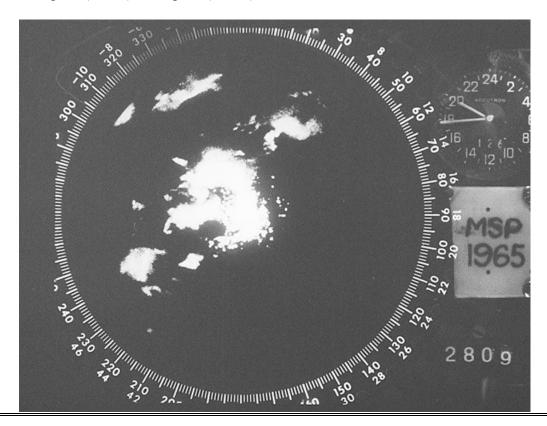


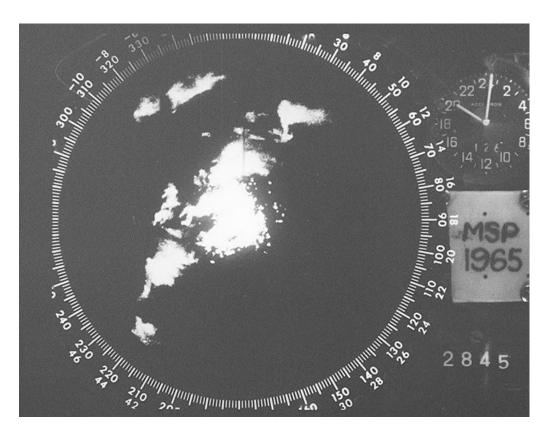
6:26 p.m. (above), 7:09 p.m. (below)



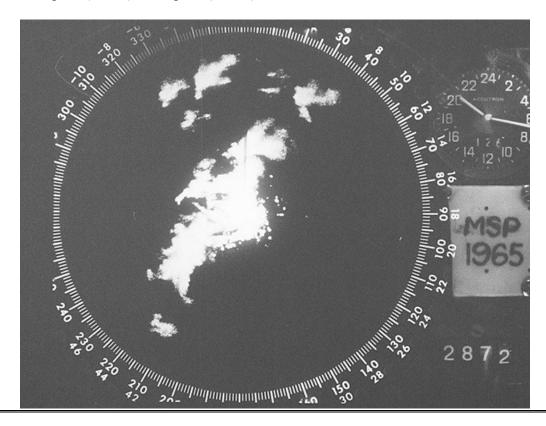


7:25 p.m. (above), 7:44 p.m. (below)



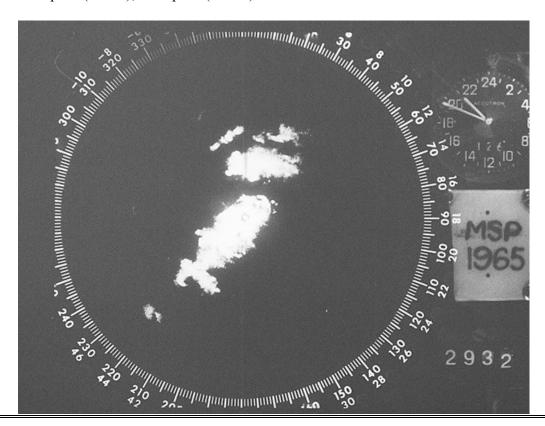


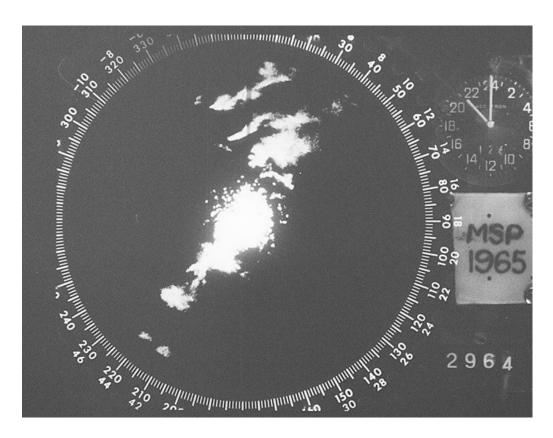
8:00 p.m. (above), 8:17 p.m. (below)



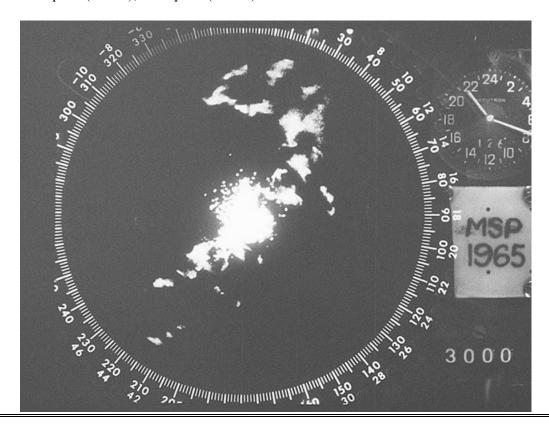


8:26 p.m. (above), 8:49 p.m. (below)





9:00 p.m. (above), 9:19 p.m. (below)



Metro Area Survivor Stories:

1. Photo and Story of Anine Thomas, Fridley, MN (submitted to NWS Chanhassen)

My family was in the 1965 tornadoes in Fridley. There were 3 tornadoes that day. One came in and blew the windows out of the apartment. Then a short time later, two came in side by side and wiped out a lot the houses. I was a baby but my parents talked about it. I also know someone that watched them from St Paul as the tornadoes dropped down into Fridley. I have pictures that my parents took. We lived by the oil company with big white tanks. I don't know where that was located. I can say that my mother swears that there was one tornado that came through first and blew all the windows in the 4 plex when she was hiding in the stairwell, then a bit later, two came in side by side. She saw the two as she was running to the neighbor's house. That house was the only one left standing on its foundation afterwards due to a stone fireplace in the basement.



Photo courtesy Anine Thomas.

- 2. About ten survivors from Fridley gathered recently to discuss their memories of the tornadoes.
- 2a. Gentleman who lived near Mississippi St, midway between Central and University Avenues: "I was twelve years old and we were collecting hail stones in the yard. I had no idea a tornado was coming, but my mother called me in and we went to the basement. We had a walk out basement on the north side, and we watched a picnic table lofted up in the air before it was slammed back down to the ground. Then we went to the southwest corner. This was the first tornado. The second tornado took our roof, and the third one took our furniture."
- 2b. Ken, who lived just west of Fridley Junior High: "I was working second shift and heard of the tornado forecast, so I called my wife at home, who said 'what difference does it make?' But she and our three kids went to the next door neighbor, who took them in for shelter before the first tornado struck. And that was a good thing, because the southwest corner had the most debris of any part of the basement.
- 2c. Gentleman who lived in the Melody Manor neighborhood of Fridley, north of 73rd Avenue and midway between Central and University Avenues: "We heard of a tornado in Minnetonka. We went to the basement, and a steel beam came down and landed on a freezer chest close to where we were sheltering. We helped search for a missing child, who turned out to be all right. The first tornado did not do much damage, but the second one did. It was dark so we called out the names and everyone answered. We said the Lord's Prayer in thanks, and are still thankful."
- 2d. Kay, who lived just southwest of University Ave and Mississippi St: "I was very young, but I remember we took shelter under a cement sink. I also remember the green sky. Our house suffered no damage, but others very close to us were hit hard." Kay also mentioned her father being the city assessor at the time, and there was a giant map of Fridley on the wall at their home showing all the damage areas in the city. There were three distinct areas of damage across Fridley. Unfortunately, the map is long gone."
- 2e. Carl L, who lived just west of Fridley High School: "The first tornado took the garage and smashed some windows, but the second tornado was the bad one. We could hear its loud noise coming toward us. After the first tornado, the neighbor's garage was rotated 180 degrees! A neighbor's wheelbarrow was thrown into a tree, and the neighbor left it there as a reminder. The tree actually grew around the wheelbarrow, and it was still there, at least until 1990 and maybe later. There were mounds of rubble on the streets, and people would bring their debris and place them in the piles to be burned. There were many fires in the streets where they were burning the debris piles. The next day started out nice, but there was very heavy rain in the afternoon. It became quite cold the evening of the 7th. Later on, one neighbor across the street was mad and complained, asking 'when are you going to get your roof off my driveway?'"

- 3. Notes To NWS Meteorologist Todd Krause via social media:
- 3a. Vicky from St. Louis Park: "I was a high school senior. I remember a small tree bent at a 90-degree angle in our front yard. A few days later, my dad's boss took us out on his boat on Lake Minnetonka to see the horrific damage. Some huge homes were left with only their chimneys standing."
- 3b. Jim from Minnetonka (west of Highway 7 and Williston Rd): "We were watching it from our basement. I had been playing in the front yard and my parents called me in, and we went right to the basement. The next day, we had to ride the school bus to West Junior High (near Highways 7 and 41). It was a long bus ride on Highway 7. Between Deephaven and Excelsior, there was the path of a tornado that had been on the ground for several miles. The path looked like someone had a giant lawnmower and cut a path through trees and homes from one side of Highway 7 to the other, as far as you could see in both directions."
- 3c. Barb from Golden Valley (just northeast of Highway 100 and Bassett Creek): "We were in the basement watching the funnel cloud scoot through the back yard. Interesting though, we were all huddled around the window watching the action. And of course, we were fully equipped with candles and constantly reminded to finish our homework. Neighboring houses had their roofs taken off, but we only had minor damage."

Glencoe Area Survivor Stories

About ten survivors from rural Glencoe gathered recently to discuss their memories of the tornado. The common theme is that most everyone was in their barns since it was evening milking time. They either saw the tornado coming or had it hit without realizing there was a tornado coming at them. There were no sirens in the area, nobody was listening to the radio, and nobody called anyone else since there was no time to do so.

1. Photos and Story of Sonny Teubert of rural Glencoe.

The Teubert house was a converted school house, midway between Glencoe and Lester Prairie. Mr. Teubert said it sounded like 40 freight trains and that he ran in the basement to take shelter. A couple cement blocks came down and hit him in the shoulder, but he was otherwise unscathed. As soon as the tornado moved away, he came up out of the basement and watched two or three tails behind it.

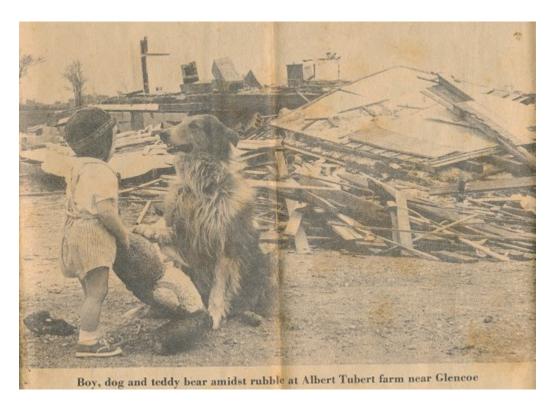


Photo of the front page of the New Ulm Daily Journal of May 14, 1965 as scanned from a newspaper provided by Sonny Teubert of rural Glencoe. Photo courtesy of the New Ulm Journal.

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Photo courtesy Sonny Teubert. The entrance seen here is to the basement.



Photo courtesy Sonny Teubert. Very little was left of the first floor.



Photo courtesy Sonny Teubert.

2. Story of Orville Brinkman

The weather had been terrible the last three months, with the St. Patrick's Day snow storm, the April flood, and now the 1965 tornado. In fact, an ice jam during the flood had been broken up with explosives that shattered the windows of the Brinkman home. Orville said that field work had been delayed due to the flooding. On May 6, he was out in the fields doing open tractor cultivating since it was one of the first days that was nice. It was very hot and muggy. Mr. Brinkman said that at about 4 pm, he drove three miles to go get a load of hay for the cows. He was within half a mile of returning home at 5:15 p.m. when the hail started. He got home and got the cows in the barn and fed them. The hail had lasted maybe about half an hour and it got quite cold. He went in to eat supper, then saw the tornado coming and that it hit the neighbors' place. The family was in the basement, but it was not windy yet. He saw a box elder tree go down despite no apparent wind, so he then went in the basement, and one minute later, it hit. There was maybe about one hour between the hail and the tornado, or maybe one and a half hours. The house was built in 1891 and is still standing! However, the house was black from all the shingles. Mr. Brinkman stated that somebody northwest of Glencoe had claimed they found a cluster of hail stones stuck together that was six inches across.

3. Photos and Story from Mopsy Karg of rural Glencoe.

The Karg farm was near Knife River, in Helen Township, on the south side of Highway 212. Mopsy had just finished milking the cows with her three kids when the electricity went out. She was about to send her oldest child out to check on the cows since the electric fence was no longer operating. At that point, the child said the barn was moving. They dove for cover next to the milk can cooler. A beam fell at a 45 degree angle onto the cooler, hitting Mopsy but not the three kids. They crawled out and got to where the hay barn had been, then had to take cover in the hay because it got windy again. She said a neighbor watching the tornado stated the tornado made a u-turn and had come back at them, then moved away. Mrs. Karg and her three children watched the tornado move away, and it was white. Mr. Karg returned to the farm but couldn't drive down the road due to the debris. They were taken to the hospital with minor injuries.



Photo courtesy Mopsy Karg.



Photo courtesy Mopsy Karg.



Photo courtesy Mopsy Karg.



Photo courtesy Mopsy Karg.

4. Story of Anna Mathews.

Anna and Earl Mathews lived about one mile east of Glencoe. They were about to start milking when it got windy, so they left the barn and sent the kids to the basement. It got worse and their ears plugged up. Earl went outside to see what was happening and had to hold on to the clothes line pole on the west side of the house. When he came to, he ended up by the lilac tree on the east side of the house, and didn't remember how he got there. The house was shifted and the roof was split, but they "squished" the roof together and still live there 50 years later.

5. Photos and Story of Gladys Donnay.

Gladys Donnay lived three miles northeast of Glencoe. Her husband, Kenneth, saw the tornado coming and told them to get in the basement. In fact, Kenneth watched the tornado hit his brothers' farm. They had five kids, and the three older ones took the two younger ones into the basement. There were three adults, for a total of eight in the basement. They hovered over the kids in the basement between the furnace and an oil barrel. The house vibrated, and when they came up, they saw the house was OK but the south side was bowed in. The house was all black from the debris. The rest of the farmstead was devastated, and they lost 13 buildings. The clocks stopped at 6:45 p.m.



Photo courtesy Gladys Donnay.



Photo courtesy Gladys Donnay.

6. Photo and Story of Esther Michaletz

Esther Michaletz also lived in rural Glencoe. She said the house was shifted off its foundation, and that nothing was left on their land. Mrs. Michaletz stated: "we survived, and that's all that mattered." Her neighbor was hit very hard and never returned to their farm.



Photo courtesy Esther Michaletz.

7. Story of Bob Wolter

We lived about 5 miles northeast of Glencoe. It had been a cloudy day that turned stormy and good-sized hail began at 6 p.m. All the hail was done by 6:30 p.m., it became very quiet and still. The sky was a greenish-yellow color. The tornado came through the farm at 6:45 p.m.

Because of these conditions, Dad started milking cows at 6:30 instead of 6:00 p.m. We were all told to stay in the house because of the uncertain weather. Mom and Grandma did dishes and we did homework. We had the TV on because we were listening for weather warnings and there were none.

At 6:45, the wind picked up rapidly, howling to almost a whine. It was a late spring that year, so there were no leaves on the trees. We saw from the front door of the house, through the bare woods, a tornado aiming right at us from the southwest. The funnel was already full of debris, as four or five farms had already been hit. I recall seeing barn doors and lots of corrugated tin swirling around in the funnel. It was dark in color, presumably from all the loose dirt it had picked up.

By this time, Mom and Grandma said we had to get to the basement. The wind was so strong, Mom and Grandma couldn't close the front door. Windows were breaking, items flying around inside and the house started shaking. By the time the five of us got to the basement door, everything quit and it was very quiet again. We were unharmed and went over to the kitchen door where Grandma first noticed that the barn was down and feared that Dad was injured or worse. We went outside to look at what had happened. The power lines were down (everything was overhead at that time) and trees were uprooted or broken. The big ash tree had fallen on the house. The barn was down and the roof was broken and scattered over the yard. The chicken barn roof was missing, the granary wrap-around machine shed had collapsed and the pig barn, brooder house, and summer kitchen were completely gone. Grandpa Wolter's prized apple orchard was completely destroyed. Dad came walking through the debris in the yard toward the house. He was fine. The rubble from the barn had been blown north into the yard. The south doors were not blocked and Dad got out easily.

The electricity was out and Dad had only a half dozen cows milked. Neighbors came over later to finish the milking by hand. People also helped to nail wood or linoleum over the broken windows on the house. A padlock was installed on the front door. We stayed at my Grandpa's place in Glencoe overnight.

Inside the house, things were dirty and wet because of the broken windows. Odd things that we noticed in the following days were moisture inside of glass fuses and straw driven into the tree trunks. I saved a corn crib board that has a wooden shingle driven into it by the wind. We had corrugated tin and even stock tanks wrapped around the trees in the grove, about 20 feet in the air. Only one animal was hurt and a neighbor took the hog to the locker plant the next morning.

Looking from our yard to the north, I watched the tornado move away. There didn't seem to be as much dirt around the funnel, but it was still black. A mile north of our farm place was a white, wooden school house, which was now used as a residence. I recall seeing the tornado destroy it. The roof went up, the walls went out and all of it just disintegrated. After that, the funnel was too far away for me to observe anything else.

The tornado itself consisted of the main funnel and two "tails" flying along behind it. The main funnel went through our woods about 400 feet west of our buildings. We assume that one of the tails went through the yard. It rained on and off the rest of the evening.

8. Story of Maynard Wolter, as told to his son Bob and other family members:

The sky just didn't look right, it had hailed, but by 6:30 the weather had quieted down. So I went to the barn to begin milking. I told my family to stay in the house. The cows were in the barn and already fed, I opened a south door to keep an eye on the sky. I got the milkers on the first three cows and checked on the weather, it was still too quiet! I changed the milkers to the next three cows and looked again. The wind had kicked up and dirt was blowing around to the southwest. As I watched, I saw a tornado come out of the blowing dirt and it was heading toward the farm. I took the milkers off the cows and set them in the walkway. I looked outside again and closed the door because so much stuff was blowing around. I jumped into a calf pen and laid down flat. I wasn't worried about getting dirty at that point. Then I could hear the hay barn roof crack and break up, starting on the west end and working its' way to the east. I thought I was done for. Then all the windows on the north wall went black, as I found out later, the hay and the roof all fell to the north blocking the windows. Things began to guiet down and I went to the south door and looked out. Nothing was in my way, so I went outside. All the buildings were wrecked: some more, some less, some gone. I walked over the boards, shingles and stuff that had blown into the yard. I saw my wife, my kids and my ma coming out of the house. They were all fine. Later on, some neighbors came over to help pick up and finish milking cows by hand. The barn, built in 1939, was 32x90, had cement block walls with a gothic roof (big arch) and the driveway was on the west end. The west end was completely wooden to the ground. That was the weakest end of the barn and once that was hit by the tornado, the barn roof continued to crack apart. The cement block portion was intact and reused in the remodeling.

Men from Lee's Super Valu and other Glencoe businesses came out with chainsaws to clear trees and help clean-up. High school students were bussed out to help clean the fields. Uncles and aunts came out, the men helped outdoors, the women cleaned in the house and made lunch for all the workers. Because of the broken windows, there was mud on the walls and ceilings. Neighbors and friends came to help clean up and offered to help with field work. One neighbor offered his empty chicken barn for our flock, as our barn was unusable. Several bags of groceries were either brought to the house or left anonymously at the mail box. Our church took up a special collection that next Sunday and divided the proceeds among the congregation members who had tornado losses. The clean-up took over three years. Things that we thought could be salvaged ended up being burned, as they were useless. We picked up nails and glass for many years.

Damage Photographs:



BEFORE THE STORM—This is how St. Peter's Bergen Lutheran church and school looked before the Thursday night tornado. The photo looks southwest, into the direction from which the

storm came. The church is at left and the school at right. (This photo specially prepared by Brinkman Studio from a colored slide loaned by the pastor.)

Photo published on page 2 of the Hutchinson Leader on May 12, 1965 as scanned from a newspaper provided by Gladys Donnay of rural Glencoe. Photo courtesy of the Hutchinson Leader.

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Photo published on the front page of the Hutchinson Leader on May 12, 1965 as scanned from a newspaper provided by Gladys Donnay of rural Glencoe. Photo courtesy of the Hutchinson Leader.

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An areal view of the destruction along Lois Drive in Mounds View. The damage at this location was due to the fourth and last of the four F4 tornadoes this evening. Picture courtesy of the Minnesota Historical Society, Photograph Collection.



A picture believed to be from the Fridley area showing tornado damage. Picture courtesy of Robert Lattery.

The following three photos are courtesy of the Fridley Historical Society.







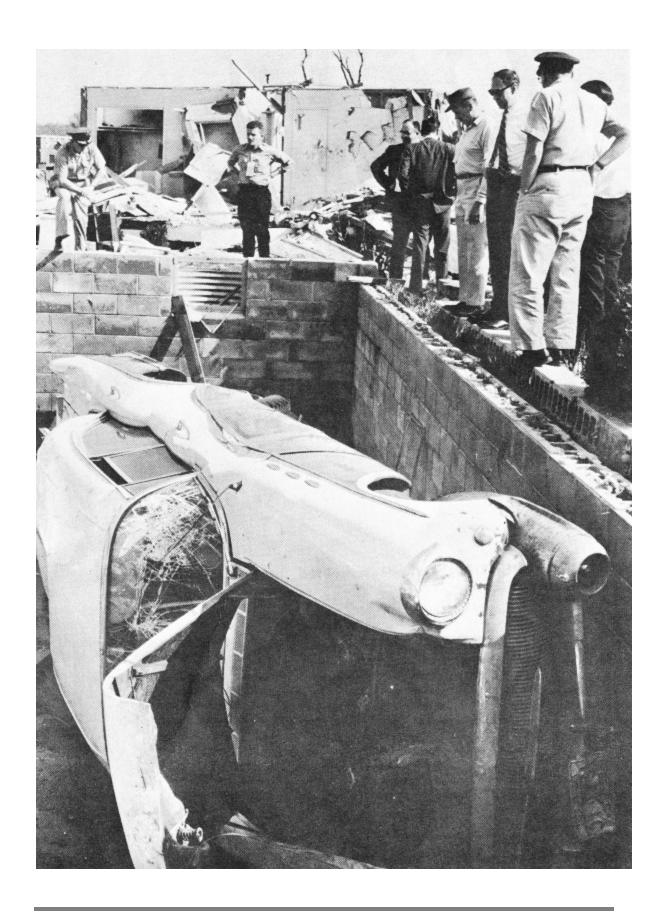
The remaining photos in this section are from the booklet "Suburbia's Longest Night," published by a division of Twin Cities Suburban Newspapers, Inc. It appears that the company ceased business operations long ago. Pictures are from Fridley, Spring Lake Park and Mounds View, unless otherwise noted.



Planes at Anoka County Airport in Blaine.



Another view of Lois Drive in Mounds View.



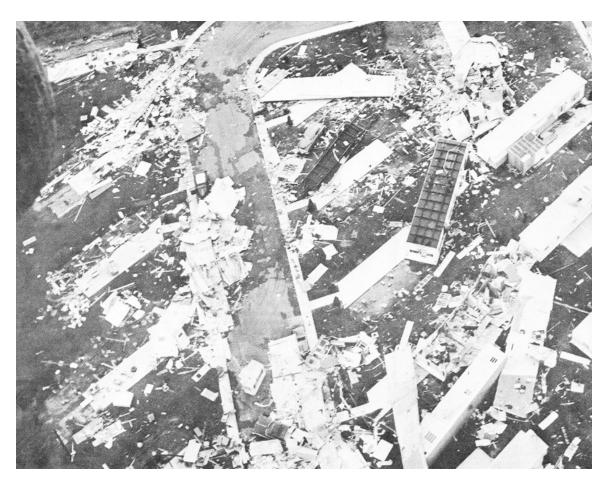


The fire station in Fridley on the southeast corner of University Ave and Mississippi St.

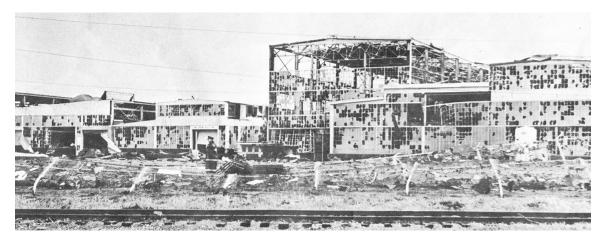




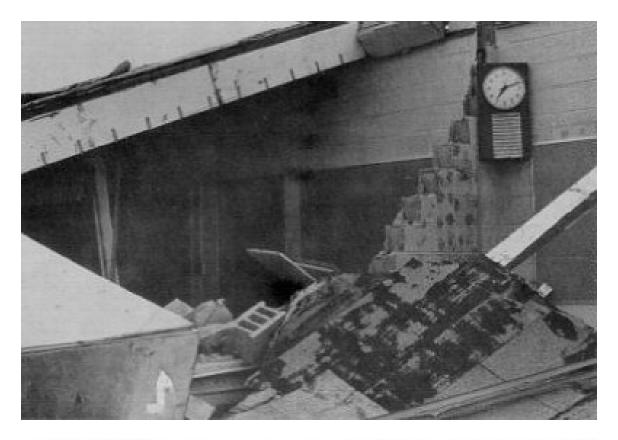




Fridley Terrace Trailer Court near Highway 65 and 73rd Ave NE was devastated.



Northern Ordnance, Inc. in Fridley was hit twice. This photograph was taken along East River Road and south of what is now I-694. In 1965, it was the largest employer in Fridley.





Spring Lake Park High School near Highway 65 and 81st Ave NE, and the surrounding neighborhood, were hit hard by the first Fridley tornado.



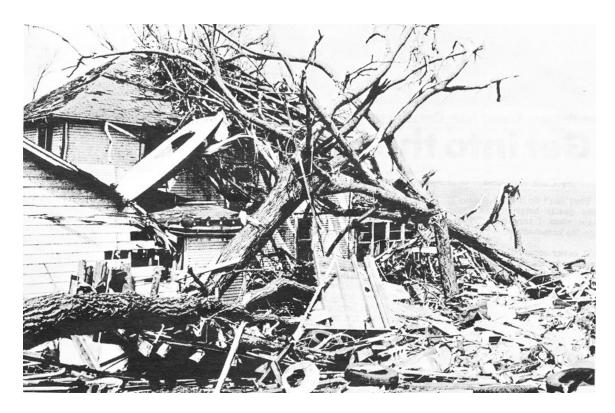
Looking north along University Avenue in Fridley. The cross street is Mississippi St. This was the main business section of Fridley. The current University Avenue is now located on the area between the two parallel north-south roads.



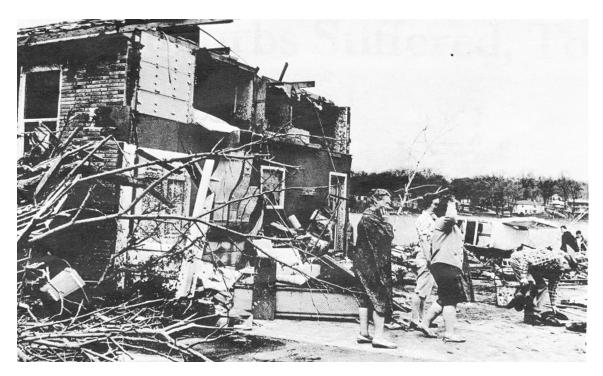
Peace officers working emergency operations in a command center.



This destruction took place on Carman Street in Navarre, midway between Spring Park and Minnetonka Beach, on Carman Bay in the central portion of Lake Minnetonka. This was from the first tornado of the evening's outbreak.



The Cottagewood neighborhood in Deephaven. This was on Bay Street.



The Cottagewood neighborhood in Deephaven.



The building on the left is the old Minnesota Boatworks on Carson's Bay in Deephaven.

U.S Weather Bureau Damage Survey:

In the weeks following the tornadoes, Principal Assistant Joseph H. Strub, Jr. (who would later become Meteorologist-in-Charge) assembled 36 slide photographs of damage from the May 6, 1965 tornadoes. The slides were numbered according to the tornado that was believed to have inflicted the damage. Specifically, Mr. Strub labeled the first tornado as starting at 6:27 p.m., moving from Chanhassen to Deephaven to North Minneapolis and Fridley, and he numbered these pictures 101 through 109. He indicated tornado #2 as starting near Green Isle at 6:50 p.m., ending near Hamel, and he numbered them in the 200s. He listed the fifth tornado as starting at 8:10 p.m., stated it was the second tornado to hit Fridley, and labeled them in the 500s. Two of the photos are too blurry to be included here. Notes written by Mr. Strub accompanied the photos. The 36 slides and notes did not cover all six tornadoes. Slides and notes have not been found for the other three tornadoes.

Following are descriptions of the numbered photos, taken from the summary compiled by Joe Strub in 1965, with additional details added in 2005 and 2015 by Warning Coordination Meteorologist Todd Krause.



101: Chanhassen 6:27 p.m. New home just completed, but nobody was living in it yet. Camera pointed north-northeast.



102: Chanhassen 6:27 p.m. Two blocks from Photo #101, and at end of row of homes to the right of Photo #101.



103: This photo is of Lake Lotus, in the far northeast corner of Chanhassen. Camera pointed west. Note the dark brown home in the left center was destroyed (partially hidden by the tree in the foreground), while the light colored home next door was okay.



104: Aerial view near Deephaven, looking over Carsons Bay. Deephaven City Hall and the Carsons Bay Bridge are visible; the road across the bay is Minnetonka Blvd. The peninsula jutting out from the lower left is the Cottagewood area, which was devastated by the tornado. The white building near the top center was the old Minnesota Boatworks, on Minnetonka Blvd., next to the Carsons Bay Bridge.



105: Aerial view. The plane was nearly over the border of Brooklyn Center and North Minneapolis, and was looking northeast toward Fridley and the Northern Ordnance plant. Structural damage at the plant was reported at over \$2 million. The plant was out of operation for over a month. The four lane divided highway paralleling the Mississippi River is East River Road. The highway across the top of the picture was Highway 100, the forerunner of Interstate 694. The airfield no longer exists.



106: Aerial view of Northern Ordnance. The plane was nearly over the border of Brooklyn Center and North Minneapolis, and was looking east over the Mississippi River.



107: Another aerial view of Northern Ordnance. The plane was over Fridley, with the camera pointed southwest toward the plant and the Mississippi River.



108: Aerial view, looking north over Fridley. University Avenue extends from the top center to the bottom center of the photo, and Highway 100 (now I-694) extends from left to right across the bottom of the picture. The first tornado, 2/3 mile wide, took a north-northeast path from Northern Ordnance, to the intersection of University Avenue and Mississippi Street, to Osborne Road and Highway 65, and into Spring Lake Park. About one hour later, another tornado (1/2 mile wide) tracked northeast from Northern Ordnance, to the intersection of Jackson and Mississippi Streets, then to the heart of Mounds View. A detailed map from Earl Kuehnast shows both tornadoes crossed paths between Northern Ordnance and just southeast of the University/Mississippi intersection. The water tower is at Commons Park, which is at the northeast corner of the intersection of 7th Street NE and 61st Avenue NE in Fridley.



109: Aerial view, looking east over Fridley. Mississippi Street is the east-west cross street, extending from the tip of the plane's wing and extending to the top center of the photo. In the lower center of the photo is City Hall (the brown roof building between Mississippi Street and the small pond), which took a direct hit from the first tornado mentioned in picture #108. Hayes Elementary School, on the left center of the picture (that is, the north side of Mississippi Street), was 85% destroyed by the second tornado.



202: This tornado touched down in Sibley County, northeast of Green Isle, just north of Washington Lake. It moved to the Hamburg area in southwestern Carver County, where this photo was taken. One farmer in a barn was killed. The camera was pointed north.



203: This photo is from the farmstead in #202 near Hamburg, looking toward the barn.



204: Aerial view of the farm in photos 202 and 203.



 $205 \colon Farmstead\ east\ of\ Hamburg\ and\ southeast\ of\ Norwood.$ The camera was pointed toward the north-northeast.



: Farmhouse described in picture #205. Five people were in the basement; none were injured.



207: Farmhouse just southeast of that mentioned in #206.



208: Aerial view of Young America. The four lane divided road is Highway #212, which was brand new at the time. The old Highway 212 was just to its left. Norwood is not shown in the picture.



209: Aerial view of Highway #5, roughly halfway between Waconia and Young America.



210: Aerial view of Highway #5, also about halfway between Waconia and Young America.



211: Farmstead just north of Highway #5, two miles southwest of Waconia. The camera was pointed toward the north.



212. Location is the same as #211. Camera pointed northeast. Donald Haines, the Minnesota State Climatologist, is in the white shirt. Note that there had been a house behind him. Four people reached the basement; all were injured, but none seriously.



213: Same as #211 and #212. This was photographed from Highway #5, looking northeast. Note the broken pine tree in the right center of the picture. This is the same tree that was behind Mr. Haines in picture #212.



214: Aerial photo of the southern portion of Mound. This is of Hardscrabble Point, at the south edge of Cooks Bay. The tornado was traveling east-northeast at the time.



216: Aerial view of Spring Park. The tornado then went through Navarre, just west of Wayzata, and ended near Hamel.



501: U.S. Weather Bureau personnel talking to a Fridley resident. This damage was produced by the first Fridley tornado, and was just north of Fridley Commons Park (the second tornado hit several blocks south of here). The third man from the left was Mr. Phillip Kenworthy, the Meteorologist-in-Charge of the Minneapolis/St. Paul office. During the tornado, there were two women in the blue car across the street. Neither was injured, though the windows were blown out. The street is oriented north-south.



502: Same area of the photo in #501.



503: Ball field at Fridley Commons Park



504: Trailer Park in Fridley. This is on the west side of Highway #65, between 73rd Avenue and Osborne Road. There was one fatality in the trailer park, as a baby girl was killed while being given a bath.



505: Looking east from the same location as in photo #504.



506: Looking north in the trailer park.



507: Walking through damage in the trailer park.



508: Aerial view over Fridley. Note Highway #65. The south end of the highway is at the lower left. The camera was pointed toward the northwest.



509: Aerial view over Fridley, taken from the east side of Highway #65 and looking west at the trailer park between 73rd Avenue and Osborne Road.



510: Aerial view over Fridley, photographed while over Highway #65 and looking southwest at the trailer park between 73rd Avenue and Osborne Road.



511: Aerial view photographed from just southwest of the trailer park shown in pictures #504-510. The camera was pointed south, looking toward City Hall, Hayes School, and Commons Park in the distance. Moore Lake is at the top left. The plane was nearly over Locke Park and Rice Creek, and most photos were taken at an elevation of about 2000 feet.

WCCO-AM Tornado Coverage:

The tapes from WCCO-AM during the evening were preserved and made available on the web site www.radiotapes.com/specialpostings.html. They were painstakingly transcribed by Jim du Bois, President of the Minnesota Broadcasters Association. Mr. du Bois has kindly provided the time line, and it is reproduced here.

The staff at WCCO-AM saved countless lives that evening, as stated by the U.S. Weather Bureau in Minneapolis. Newsman Dick Chapman anchored the announcing duties, and many staff assisted that evening, including Charlie Boone, Rob Brown, and Bob Tibbitts. It was said to be a new way of broadcasting. Before, there would be reports of tornado damage after the fact. On May 6, 1965, they were providing live coverage as the tornadoes were in progress, telling people to take shelter. The station received numerous prestigious awards, but in his obituary just three months ago, it was written that Dick Chapman said "my prize possession is a torn piece of paper from a grocery bag with a message printed in crayon that said: 'Dear WCCO Radio, Thank you for saving our lives.' It was signed by nine cub scouts who survived in a school basement while the funnel demolished the building over their heads."



Photo courtesy WCCO-AM and the Pavek Museum of Broadcasting.

May 6, 1965 Tornado Timeline (based upon WCCO recordings)

- 1800—Tornado Forecast issued for portions of extreme north central Iowa, most of southwest, south central and portions of eastern Minnesota and portions of northwestern Wisconsin
- 1830—Tornado Warning issued ("we are activating the Civil Defense take cover siren")
- 1909—Report of sighting of tornado in Carver County near Hamburg/Green Isle moving toward Norwood (sighted at 1900) another sighted by Delano police touching down at Glencoe and another just east of Lester Prairie
- 1910—public report of tornado near Waconia heading towards Twin Cities; also public report of tornado near Shakopee heading towards Twin Cities
- 1910--listener near Excelsior describes extensive damage off of Highway 7 in Christmas Lake area (houses, trees, cars damaged; power out)
- 1912—Hennepin County Civil Defense calls for all volunteers to report to HQ immediately
- 1913—reports of heavy winds and hail in Coon Rapids; also trees down at 43rd and Main
- 1913—listener report from Deephaven describes damage in Cottagewood (houses leveled; boat works severely damaged; power lines down—occurred earlier)
- 1915—WCCO's John Walker reports from Wayzata in vicinity of Hwy 12 & County 15; Civil Defense of Hennepin County is mobilized; ambulances have moved in; evidence of wind damage
- 1916—Counties warned for danger of tornadoes next hour or two: Northern Hennepin County, Isanti, Anoka, Chisago, Polk, St. Croix, Washington, Carver, Burnette, Pine 1916—Recap of initial Tornado Warning with sighting in Lake Minnetonka area. Chapman says it moved as far north as Golden Valley and to possibly New Hope/Brooklyn Center
- 1917—Listener in Excelsior (3/4 mile east of Hwy 101 & about mile south of Hwy 7 near Glen Lake) spots funnel; says two funnels at first merged and then separated; described it as "very weird looking thing"; now third funnel is merging with the others
- 1920—Second caller in same vicinity at Hwy 101 south of Chanhassen reports funnel directly NW of his location—it's the second funnel of the night he's sighted (first was 45 minutes earlier)—moving toward Excelsior—
- 1921—Flying Cloud airport reports funnel 15 mile west of Minneapolis moving northeast
- 1922—Chanhassen caller says funnel just west and north of Excelsior
- 1922—Tornado has hit Chanhassen causing damage but no injuries (Frontier Lumber damaged as well as other businesses and residences)
- 1924—radar indicates strong cell over northern Minneapolis suburbs moving northeastward but no hook is apparent
- 1925—caller (Robert Park) reports of tornado that passed through Fridley damaging Fridley Junior High School but causing no injuries to people attending spring carnival. Caller was in car in parking lot and his windows were blown out on one side
- 1926—Weather Bureau reports 3 apparent tornado cells about 20-30 miles due west of Twin Cities International Airport and two cells 15-20 miles north of airport
- 1927—caller from Brooklyn Center saw funnel looking eastward (stated two clouds formed together/merged) & saw funnel hit in Fridley (he is in NW Brooklyn Center); reports larger than golf ball-size hail at his location

- 1928—caller from St. Anthony Village (NE Minneapolis) saw "two tails" in clouds come together and move north (occurred 3 minutes earlier)
- 1929—caller saw from Marshal Ave the funnel that hit Fridley (Station ID)
- 1929—caller west of Glen Lake (on Excelsior Blvd) sees tornado to his south in vicinity of Flying Cloud airport moving west
- 1931—caller from NE Minneapolis states he was just west of Northern Pump on Hwy 100 & crawled under railroad bridge while observing two funnels damaging 100 Twin Drive-In Theater on Hwy 100 near University Ave (his was one of 7-8 cars sheltering under bridge while tornado went overhead)
- 1933—caller from Midway area in St. Paul near Snelling and University spotted funnel overhead 3000-4000 feet and slightly to his west; funnel was "hanging down" and appeared to be over Minneapolis
- 1936—caller from Mound (Orono Village on Hwy 19) reports heavy hail. Saw one "cyclone" form and then retreat into clouds
- 1937—Weather Bureau radar indicates hook echo over Lake Minnetonka just south of Wayzata
- 1938—caller one mile north of Snelling and University saw funnel 3 minutes earlier that has since disintegrated
- 1945—all Northern State Power crews report to Minnetonka Division HQ immediately
- 1946—Weather Bureau radar reports intense hook echo ("a definite tornado") between Cologne and Carver moving toward Victoria
- 1947—caller from Wayzata reports "strange green light" near Wayzata High School approaching from SW; winds are picking up
- 1948—WCCO's John Walker reports from Wayzata on County Road 15 (where they "earlier experienced tidal waves"); tornado hit while he was in Brown's Bay boat works 1949—caller states tornado hit 1½ miles north of Wayzata on 101 (minute and a half ago) moving up 101 heading north; his house has blown out windows but he did not see tornado but noted "terrific winds"
- 1954—Sherriff's deputy at County Road 6 & Highway 101 1 mile north of Wayzata sighted funnel moving to the north but did not see it touch down (estimated 400-500 feet in air); states it's heading toward Maple Grove and is only visible when lightning is present
- 1955—caller north of Wayzata states he drove down main street and witnessed large amounts of water blown on roads; his car was "blown up the hill" and had to apply breaks to slow it; no power in Wayzata; almost continuous lightning
- 1956—confirmed tornado touchdown in Spring Lake Park; considerable damage; struck 45 minutes earlier
- 1956—caller at Highways 101 & 7 reports funnel 7 miles south of his location in Shakopee vicinity
- 2000—on-air confusion over whether Spring Park or Spring Lake Park was hit by tornado
- 2001—searchlight in operation near Glen Lake
- 2003—caller states funnel passed over the west edge of Brooklyn Park near Eagle Lake near County 18; was "bouncing" & heading towards Osseo
- 2003---all available doctors report to Mercy Anoka Coon Rapids Hospital

- 2003—tornado strike at Spring Lake Park confirmed
- 2004—semi-trailer overturned at Highways 65 & 10
- 2004—police report funnel over Southdale (report came from 94th and Normandale); caller from Hopkins confirms that funnel is towards Edina moving to NE; "still pretty high in air" & heading towards Minneapolis
- 2007—caller reports funnel over Southdale moving east between Hwy 62 & 494 & between 66th and 78th and France; "quite high in sky"; tail is draping on diagonal trajectory; caller at 6335 Peachdale Ave near Hwy 62
- 2009—police report funnel 2 minutes earlier in the 6800 block of 10th Ave S moving towards Lake Nokomis
- 2010—caller near County Road 18 & Excelsior Blvd in Hopkins reports funnel to southeast moving west-northwest; "horizontal funnel, very white"
- 2011—Minneapolis police report funnel high above Lake Nokomis moving northeast
- 2013—Minneapolis police say funnel is now moving westerly; warn people in Lake Calhoun & Lake Harriet areas
- 2013—WCCO Radio announcer Jim Hill states that he saw two different funnels from his home near Southdale off of 62 Crosstown: "long funnel, very high in the air"
- 2015—caller from Lake of the Isles at 26th Street states funnel passed over house; horizontal funnel
- 2016—safety rules and Station ID
- 2020—caller states she saw funnel over Lake Nokomis from her location at East 55th Street and 31st Ave
- 2021—extreme damage reported on Osborne Road in Blaine Village; call from Southdale area says funnel has dissipated
- 2021—caller from Midway sees funnel forming ("two clouds connected in middle up in the air") from his location near Hamline and Minnehaha; funnel was NNW of him
- 2022—Highway Patrol asks motorists to stay off Hwy 65 into Anoka County
- 2024—caller from Columbia Heights spots funnel moving NW
- 2026—Station ID
- 2026—Anoka police report no damage in Anoka; need for doctors is in response to injuries in Fridley and Spring Lake Park; both "hit hard"
- 2027—caller from Bloomington says funnel is setting down 3 miles east of Southdale and is approximately 500-1000 feet off of ground (just north of Bloomington outdoor theater) & moving "swiftly" NE heading towards St. Paul
- 2029—St. Cloud Weather Bureau reports possible tornado at Clear Lake just south of St. Cloud; new counties added to Tornado Warning area: Sibley, Scott, Le Sueur and Northern Dakota counties
- 2030—report of damage in Glencoe; mink farm hit with many dead mink; cars blown off road; injuries; also Hwy 12 blocked with trees and wires 4 blocks west of Wayzata 2031—reports of wind in Lake Minnetonka area
- 2031—caller confirms funnel sighting in Bloomington over outdoor theater (calling from 81st and 2nd Ave near airport) moving towards the east; "quite high"
- 2032—Mercy hospital reports that more than 25 people have been injured in Fridley and Spring Lake Park (nature and extent of injuries not reported); tornado hit Spring Lake Park approximately 1915; at Fridley, roof of high school damaged; spokesperson at Mercy Hospital says they are too busy to count the number of injured; Weather Bureau

radar shows strong thunderstorms with possible funnels aloft/tornadoes over Le Sueur, Sibley and Scott and Northern Dakota counties; rain and hail 5-10 miles east of Brainerd moving NNE

2034—report from Loring Park (Spruce Place) in Minneapolis that man hid in closet and heard "tornado-like noise")

2035—caller from Golden Valley reports clouds formed "cone-shaped funnel" that is moving north from Hwys 55 and 100

2036—Station ID and storm safety info

2038—caller reports what might be a funnel moving down Franklin Ave in Minneapolis though he's "not sure"; reportedly 500-600 feet in air

2038—caller from Columbia Heights (46th and Johnson Street) reports funnel over Fridley (1-2 miles away from his location); it's "a real big one"

2041—WCCO's Sherman Schultz calls in with report of being hit by tornado at Anoka County Airport. Reports all planes parked outside are damaged or destroyed. Planes tossed 100 feet in air. Saw tornado.

2041—caller from St. Anthony Village states tornado near Columbia Heights/Fridley area; large funnel; (states it's 8-9 miles northeast from his location) reports that it dissipated while giving his report

2046—caller from 36th and Van Buren by Columbia Golf Course states tornado sighted NE of him 10 minutes earlier

2048—at least one fatality has been reported; no details available

2050—report of damage east of University Avenue and north of 40th

2052—caller from 50th and Aldrich N reports damage to roofs, fences, windows etc. occurred 5-6 minutes earlier; area hit was north of Camden in Minneapolis. Thought it was tornado but not sure

2056—report of turbulence & wind vicinity Hwys 65 & 100. Same in New Brighton (occurred 3-4 minutes earlier)

2058—radar at 2045 (13 minutes earlier) indicates broken line of thunderstorms, many of which are heavy, extending from northwest of Duluth southward over the Twin Cities then southwestward to the Iowa border. Average width of the line is about 30-40 miles moving very slowly eastward. No hook echoes are apparent indicating a lessening of activity. All counties should remain alert for severe thunderstorms or possible additional tornado activity.

2059—caller from south Minneapolis sees funnel to the north in New Brighton area. Reports another "finger hanging down that's east of the big finger"; "two fingers hanging down"

2059—reports of ground damage in north Minneapolis and suburbs to the north of Minneapolis

2100—caller near Hwys 100 & 52 watching funnel heading toward Coon Rapids area (saw it 2 minutes ago earlier) and described it as a "finger hanging down"; saw large and small funnels

2102—Station ID

2105—recap of damage reports—less likelihood of tornadoes after dark

2108—tornado on ground in Shoreview moving east; separate caller from Washington County (location about 3 miles west of Lake Elmo and about 2 miles south of 36) states

- there are two funnels he can see; looks like one over Stillwater; the two are side by side & not touching ground
- 2109—caller from St. Anthony saw tornado about 10 minutes earlier heading NE towards Forest Lake; "big one touching ground"
- 2110—caller north of St. Anthony sees funnel close to ground heading NNE
- 2111—Downtown Dayton's will stay open to shelter shoppers
- 2112—caller from Flying Cloud says all planes OK & storm seems to be over; stated he and coworkers saw 5-6 tornadoes pass by; calling from Nelson Ryan
- 2115—caller from Stillwater watching funnel on Wisconsin side of St. Croix River
- 2117—Burnsville police report severe lightning...house is burning
- 2119—caller from Washburn and 75th near 494 & Met Stadium sees funnel 1.5 miles west of his location near Penn Ave by Mann Theater just south of Richfield
- 2128—WCCO's Charlie Boone states the previous reports of funnels in southwest Minneapolis are inaccurate; squall line but no funnels
- 2133—Station ID
- 2133—WCCO's Chuck Lilligren in mobile unit at 49th and Camden in north Minneapolis reports "severe wind damage" in area; eyewitness states the storm struck about 30 minutes earlier and "sounded like a train"
- 2135—Phone circuits are becoming overloaded; no unnecessary calls
- 2135—John Walker reports from Wayzata on family that heeded radio warning and sought shelter in basement; their home near Lafayette Bay on County 15 just west of Minnetonka Beach destroyed; Walker states "idle curious are beginning to come around and are not helping much"
- 2140—police advise to stay away from University Avenue and Hwy 100 and 50th and Lyndale areas; debris blocking roads
- 2142—Lilligren in mobile unit proceeding north on Lyndale; trees, signs, fences all damaged; not much damage to homes; states the damage occurred on "scattered blocks in the area" and is not continuous in coverage
- 2145—mobile unit in Chanhassen reports that area just north of business district "hit hard"; damage to Frontier Lumber Company and Jerry's Mileage station; estimated 90% of homes in Scholler & Near (SP?) housing development damaged
- 2148—1/2" hail reported in Edina
- 2149—emergency shelter/staging area established at Highways 10 & 65
- 2149—police warn sightseers to stay away from North and Northeast Minneapolis
- 2150—caller from Noble Avenue and Golden Valley Road reports on tornado damage that occurred 45 minutes earlier; windows in house broken and "part of somebody's house crashed through my basement door"
- 2151—report of first known fatality: 56-year-old Ray Perbix of Norwood; in barn at time tornado hit; body thrown 100 feet; very heavy damage in Norwood area, 15 homes destroyed and 30-40 barns damaged
- 2157—damage report from 42nd and Humboldt Ave N—trees down, garages wrecked, houses with broken windows, boat tossed in yard
- 2159—Hennepin County Sherriff states sightseers are hampering rescue efforts; stay away from damaged areas
- 2204—1/2" hail reported in Hopkins; ping pong ball size hail in St. Anthony Village & fallen trees/power lines are blocking streets

- 2205—report that "most—if not all—routes to the north, south and west of the Twin Cities are blocked by debris"; Highway 12 closed in many places in Lake Minnetonka area
- 2206—Station ID
- 2206—report of "several million dollars in damage" at Northern Ordnance in Columbia Heights
- 2207—strong thunderstorm moving towards White Bear Lake with large hail and high winds
- 2210—caller from Fridley Terrace trailer park reports severe damage from storm that hit 10 minutes earlier; states that he did not see funnel but his wife "thought that she did"; address is 74th and Lexington
- 2214—Fridley Junior High School teacher reports that they are trying to drive children at the school home but most roads are blocked; describes areas between University Avenue and Highway 65 and south of Highway 100 as far north as 61st or Rice Creek are heavily damaged; the Junior High is severely damaged as are Parkview and Hayes; High School also damaged
- 2218—Lilligren reports from Northern Ordnance calling it an "awe inspiring sight"; facility is severely damaged; high-tension towers are "bent completely over"; fencing is down for "hundreds of yards"; cars are blown off of nearby highway; states they did not encounter the storm that hit Fridley Terrace earlier
- 2223—report that Fridley Terrace "hard hit with trailers flattened"; severe damage reported in Navarre
- 2224—at least two persons killed by storms and 50 injured; Ray Purvis (different spelling than previous report) of Norwood and Mrs. Alma Grinde killed in Spring Lake Park; doctor at Mercy Hospital in Coon Rapids reports 50 people being treated there and at least 25 in critical condition
- 2227—WCCO's Dick Chapman speculates that damage at Fridley Terrace "must have been highly localized" since Lilligren at Northern Ordnance did not experience that storm 2228—1 ½" hail in Burnsville
- 2229—caller with relatives in Spring Lake Park can't reach them as lines are down in the area; states that she called Mercy hospital and was told that rescue workers cannot reach victims because of sightseer traffic
- 2230—Station ID
- 2233—"strong hail" reported near Knollwood Plaza in St. Louis Park
- 2233—John Walker reports that he "just came through Navarre...I mean what was Navarre. Navarre no longer exists, at least the crossroads of County Roads 15 & 19." Area is "completely leveled." Houses on Casco Point "severely damaged"
- 2236—hail moving from Burnsville towards Eagan Township in direction of International Airport
- 2237—caller from New Brighton reports ½" hail with heavy rain and winds occurred 2-3 minutes earlier
- 2243—caller from Robbinsdale reports 1 block stretch just west of North Memorial Hospital along Chowen Avenue between Lowry and Oakdale suffered damage; garage demolished, church damaged and roof torn off house; Chapman again notes the "spotty" nature of some of the damage reports "indicating the bouncing effect of tornado funnel"; he also notes that windstorms can produce similar damage patterns

2244—caller in Hopkins reports that he drove in from Hector through Glencoe on Highway 212 & then along Highway 5 to Highway 7 and "crossed the paths of 4 tornadoes. One just outside Glencoe, two around Norwood, one between Waconia and Victoria and another on Highway 7 just east of Christmas Lake." (Note: he says he crossed 4 tornado paths but describes "two around Norwood" bringing the total to 5.) 2246—police report three persons killed in Island Park area on western edge of Lake Minnetonka with dozens still trapped in wrecked homes. Report of 60 injured at Spring Lake Park and Mounds View, many in critical condition

2250—golf ball size hail in West Bloomington

2251—1" hail in Northeast Minneapolis

2252—caller reports that Holly Center at University and Mississippi is severely damaged; new fire station is "gone"; National store has front blown in; along Mississippi Street from Holly Center to Highway 65 "almost all the houses are damaged or destroyed"

2254—thunder and lightning at Glencoe; Weather Bureau radar indicates broken line of thunderstorms about 50 miles wide from the Faribault and Norwood areas northeast to Lake Superior moving northeast at 35 mph. No hook echoes are apparent although tornadoes may still occur along with heavy thunderstorms with hail and strong winds. If the present movement continues, the activity will move out of the Twin Cities area around midnight. If so, the all clear will be issued. The Tornado Forecast for northwestern Wisconsin has expired. A few locally heavy thunderstorms with hail and strong winds may occur from north of Alma, Wisconsin to Iron Mountain, Michigan until 1 a.m. Central Daylight Time.

St. Croix County Sherriff's Office reports a funnel was sighted 6 miles north of Hudson earlier and was last seen between Holton and Somerset.

2258—very heavy rain and golf ball size hail at Bush Lake in Bloomington 2258—Station ID

(There is a 51 second gap in coverage here, either due to a delayed tape change or a portion of the broadcast being edited out)

2259—WCCO engineer in mobile unit states the he can readily see the tornado path from Camden in North Minneapolis through Fridley. He describes it as being "straight as a string"

2300—report of heavy damage at Fridley Terrace trailer court; houses are "completely gone" in the Melody Manor subdivision in Fridley at 71st and University; Spring Lake Park north of Osborne Road hard hit

2304—heavy hail in Edina

2305—Lilligren reports from command post at Highways 10 & 65; injured continue to be brought in and house-to-house searches are underway; no power in area; ambulances are coming and going; hospitals in suburbs are full and injured are being sent to hospitals in Minneapolis and St. Paul; Hill View area of New Brighton hard hit; residents should check-in at Hill View Apartments

2309—heavy hail at Blake Road in Hopkins; heavy rain in downtown Minneapolis

2311—heavy rain and hail at University of Minnesota ("worst of the evening")

2314—Minneapolis Police will begin tagging all people in North Minneapolis starting at 11:30 p.m. who cannot prove that they live in the area

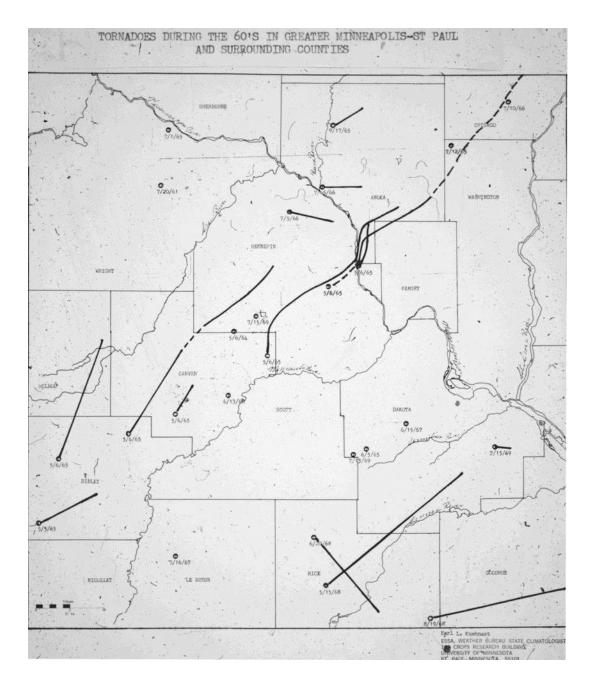
- 2322—WCCO's Bob Potter reports from Golden Valley Fire Department and says there is extensive damage starting at Highway 55 and Douglas Drive and extending northeastward across Golden Valley. Damage track is 6-7 blocks wide. Firemen believe 2 tornadoes went through city. (They saw one.)
- 2325—caller from Christmas Lake area states that he saw a tornado at 1810. He observed it on the ground from Highway 5 to Highway 7. It hit Lotus Lake. Does not believe it is the same tornado that hit Cottagewood.
- 2336—7 now known dead, 5 of whom have been identified
- 2339—mobile unit report at Mercy Hospital states 81 patients have been admitted from Spring Lake Park, Fridley and New Brighton
- 2339—report from U of M area of "Little League baseball size hail" that occurred 15 minutes earlier
- 2341—caller from Circle Pines reports power lines down at Highway 8 and County Road J with heavy rains and hail (occurred a few minutes earlier)
- 2343—caller reports damage on the south side of Island Park
- 2345—attempt to locate 4-year-old Gregory Magsan, missing in the Mounds View area (he was one of the fatalities in the Lois/Knoll Drive area of Mounds View)
- 2346—caller from Bloomington says he can see the moon and the skies are beginning to clear
- 2351—all personnel of Company C, 1st Battalion, 135th Infantry ordered to report to East Side Armory in St. Paul immediately
- 2351—caller from Island Park (Vincent Bernard) states two tornadoes hit the area, one on the east side of the island and the other on the west side. One of them (the same one that hit Navarre) picked up his car with him in it and dropped it in Lake Minnetonka about 100-150 yards from shore. He says the storm hit with "no warning and no sound." It sank in 20-25 feet of water. His watch stopped at 1941. Says the car rolled "on a different axis from the twister" as it was carried aloft. Says it was rotating around a horizontal axis. Chapman observes that "people who study tornadoes will want to talk to you." 2358—Weather Bureau issues all clear. No further severe weather expected in Twin

Cities. Radar indicates main band of storms now just east and northeast of Twin Cities extending towards Lake Superior.

Controversy Regarding the 1973 Revision of the Tornado Statistics:

Six tornadoes were listed in the original publication of "Storm Data" of May 1965. There are still six tornadoes for this event, but the timing and tracks of several tornadoes were changed in 1973. The number of deaths was reduced from 14 to 13. All these years later, the most intriguing mystery concerns the 1973 revision to the original tornado data. There is no record of why this happened.

Fridley was originally credited with three tornadoes, as determined in 1965 by Meteorologist in Charge Philip Kenworthy and Climatologist Donald Haines. Many, many eyewitnesses described three tornadoes in Fridley, each at a different time of the evening. The written summary contained in the May 1965 edition of Storm Data described these specific tracks and times, and also mentions three tornadoes as having hit Fridley. A map of tornado tracks of the 1960s, probably produced in 1970 by State Climatologist Earl Kuehnast, shows three tornadoes having moved across Fridley on May 6, with the first Fridley tornado having touched down in Chanhassen. The Green Isle tornado was also shown as having moved across western Lake Minnetonka. The dashed lines appear to be where it was thought a tornado "lifted up" for a time.



Tornado tracks of the 1960s.

	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED† DAMAGE		
PLACE					KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
MINNESOTA (Cont's Fairmont, Martin county	6	7:30p	ith st	ones up	0 to 3	0 inch	4 es in	0 diamet	Hail er fell in Fair-
	mont		ag ext	ensive					s and minor dam-
McLeod, Sibley, Car- ver, Hennepin, Rem- sey, Anoka, Isanti, Chisago, Kanabec,	6	6:27- 9:20p		i	14	683	7	0	Tornadoes, funnel clouds, winds, and hail
Washington counties	dama Thro eapo	ge and cough the e	vening adar adar	tion so 24 hook and a la ported.	uthw sha rge Man	este pede numbe	nd jus choes r of c	t nort appear onfirm	on with greatest h of Minneapolis. ed on the Minn- ed and unconfirm- , up to golf ball
	The yard wide nors dest und dest against it is self the ress some Weath Frid About she is self the property of the control of	tornado ti and 6 bu Two cli hward to royed witi northward and 32 rec g 100 hom e Lake, to re it inf s in Minn ppi River it trave he FMC to ley City first of dents hit suffered her Burea h count t 1,700 p ter elsew mated the erty dama sand phone	nen sk llding ocks in Lotus in 15 he into eived in es, curbuched licted espoliciento into led no rporat Hall ti three by 2 demag and led 42 espole tere. demag ge est	ipped not a in a i	crithweshopp icini icout ring istma istma istma icfli isma icfli icopp is to is to is to is to is to is to is to is semi icous icfli icoup icfli iccoup icfli icoup iccoup icfli icoup icfli icoup icfli icoup icfli icoup ico	ard ting c ty st 20 ho minor s Lak . It stwar y at e on ed be ction ing t cont pped hit an h hree natio age f and thei scho alon e may yice	o Cham enter copped mes re damag e area then d, the Hiway at leas fore in inuing at 7: l this s our an illoo to r home of dir	hassen in a p at 6:2 ceived e. Th where moved reby g 100 in st 6 h t move e subu thern throu 0p giv uburb. d 135 m 11ent adio h e thre adiy d s and trict bout \$ \$8.5 m the n	ight in the north-
	pass Blas	ing just	rest o	f Spring	; Lak	e Par	k and	touchi,	kipped northward ng down near d destroying 10

Original Storm Data entries for May 6, 1965 in Minnesota. The number 7 in the damage column corresponds to the category between \$5M and \$50M in losses. The narrative details more specific damage totals.

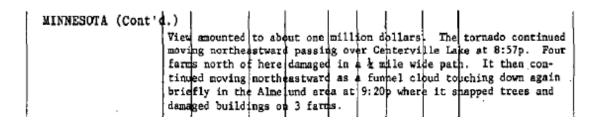
A second tornado reported at 6:50p near Green Isle by an airline pilot. It moved northeastward flattening form buildings and trees. Three miles SE of Hamburg a farmer killed along with a barn-full of prize cattle at 6:55p. The funnel cut a & mile wide swath through here. It continued northeastward just missing Norwood-Young America, and Waconia in a path of snapped, twisted, and stripped trees that sometimes was as wide as } to 3/4 of a mile. All buildings completely destroyed on 20 farms in this 8 mile long section of the track. The wortek moved upward and descended again mear Hwy #7, west of Lake Minnetbuka. It moved over Island Park. killing one woman, and destroying 8 homes and 3 farm building units. It continued through Mound killing 2 people and damaging many homes. Moving through Spring Park and Mayarre it destroyed about 30 homes, many boats and a respect, and badky damaged the Nawarre business. district. It crossed Hwy #12, just west of Wayzata, destroying the Country Club horse barn. From here it moved into the Hamel area where it apparently dissipated.

The third tornado began about 6:55p midway between New Auburn and . Glendoe and moved about 15 miles to the northeast dissipating near Lester Rrairie. It followed a zig-zag pattern, destroying or badly damaging 25 farm building units and demolishing a church and school. Damage estimate placed at about \$1 million:

The fourth tornado touched down about 7:15p and followed a short path from southwest of Cologne (west of Gotha) to just northeast of Cologne. Three barns destroyed.

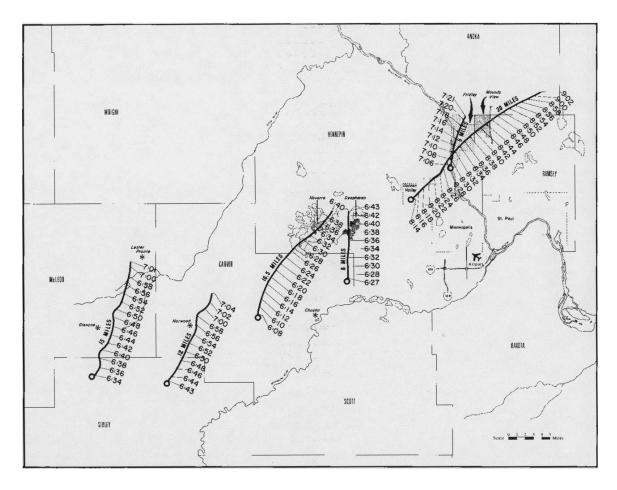
The fifth tornado first observed near the Minneapolis-Fridley bor-Her at 37th Ave. NE and Marchall. Several people had observed a huge funnel cloud form in the Chanhassen area sometime before and move northward. This may have been the beginning of this tornado. It moved from northwestern Minneapolis eastward over Northern Ordihance (the second strike on this large industrial complex) at 8:10p and then NNE across Fridley It hit Fridley's main school and park complex, among other structures, then moved northeasterly and struck the Bridley Trailer Court. This and the sixth tornado both hit this 275 unit trailer court! Two-hundred trailers were destroyed, some apparently had exploded, but only one person, an infant killed. Many people in this Park took shelter in the cinderblock wash house. The tornado continued northward from here into the next suburb, Spring Lake Bark. Here 150 homes destroyed and 145 heavily damaged. About 75 % of Spring Lake Park businesses in the city were demolished and 900 people were left homeless. The tornado lifted or dissipated at this point, although sometime later there was wind damage to 3 farms in Braham area 50 miles NNE of Spring Lake Park.

The sixth tornado first touched down in Golden Valley near 8:40p at Louglas Drive and Hiway #55 damaging 25 homes and 8 businesses. It travelled northeastward touching down again in Fridley (the third tornado to hit Fridley) near Hiway \$100 and University, moved northward through Fridley between the paths of tornado number one and number five. It curved ENE at Mississippi St., then turned northward again just west of Hvv #65 and went through the Fridley Trailer Court. It moved northeastward through the suburb of Mounds View where 6 people killed and 150 Injured. At least 45 homes and 6 apartment buildings destroyed. Total damage in Mounds

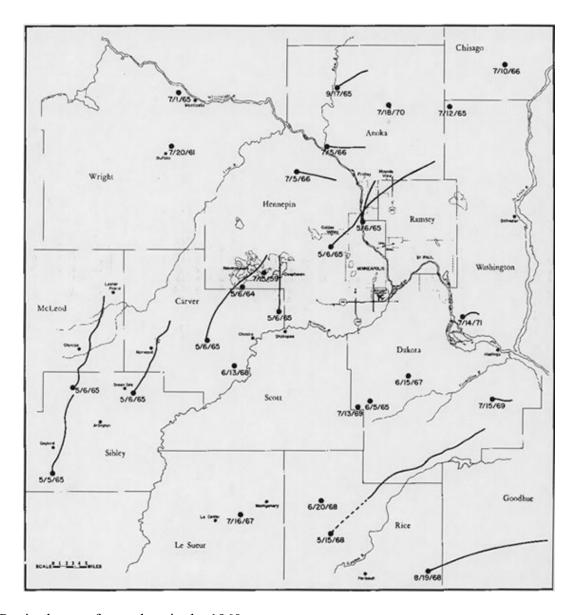


The original account remained official until 1973, when State Climatologist Earl Kuehnast updated the 1965 tornado maps for the entire area. Meteorologist-in-Charge Joe Strub apparently agreed with Kuehnast's 1973 revision, because official Storm Data records at NOAA's National Climatic Data Center were updated, and the revised stats are the official NOAA records. Mr. Strub died in 1976 and Mr. Kuehnast died in 1990.

The only documentation regarding the revision are three hand-sketched maps uncovered from the files of Earl Kuehnast. They are dated January and February 1973. Mr. Kuehnast even placed a large "X" across the 1965 version, clearly indicating he no longer believed the original map to be correct. Two maps published in 1975 show the revised information - these are in "Climate of Minnesota, Part VIII - Precipitation Patterns in the Minneapolis-St. Paul Metropolitan Area and Surrounding Counties." They are shown below:



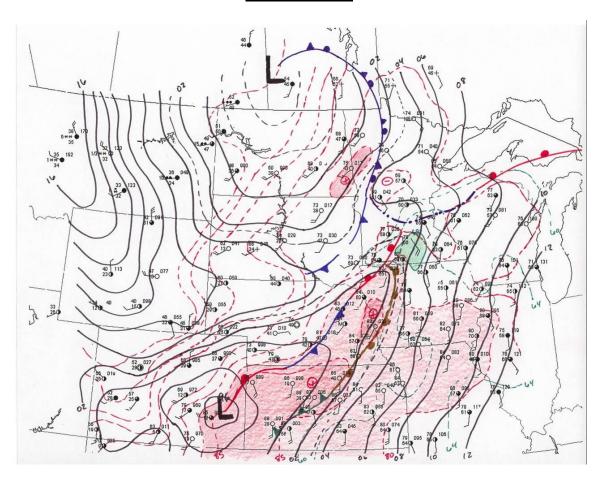
Revised map of the 1965 tornado tracks and times.



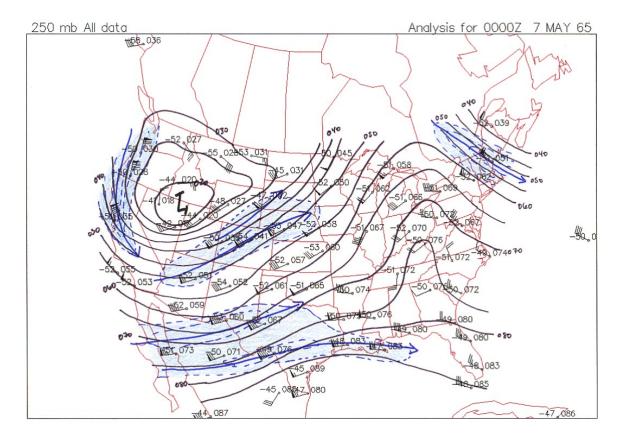
Revised map of tornadoes in the 1960s.

During Todd Krause's interview with Dean Nesley, he was asked about the question regarding the 1973 revision in the tornado record. He stated "we had the times pretty well in line in the 1965 report. Jim Stone and I were very adamant about that, and we did not go along with that change. We knew differently. Earl did that. I don't know why."

Weather Maps:



The surface map at 7:00 p.m. CDT on May 6, 1965. Low pressure was in southern Manitoba with a weak front looping to the east and then south across western Minnesota. A stationary front extended from Colorado to southern Minnesota. It is believed (and radar from the morning and midday hours of May 6 shows this) that an outflow boundary was draped from the Alexandria area to the Twin Cities and back into northwestern Wisconsin.



Upper air map at 7:00 p.m. CDT May 6, 1965. The level is 250 millibars and it shows southwest winds aloft over Minnesota. The shaded blue area shows a strong wind maximum moving into the area. Essentially, a jet streak is moving into the region.

Additional Information

Fridley Historical Society:

http://fridleyhistoricalsociety.org

8mm film of the damage in Fridley:

https://www.youtube.com/watch?v=EagEra6-

2e8&index=61&list=PLMzPO4IGbUHI7q1NsHQtB YR3Mlc6jH5i

Minnesota State Climatology Retrospective:

http://www.dnr.state.mn.us/climate/journal/1965 Tornadoes.html

Excelsior-Lake Minnetonka Historical Society:

http://www.elmhs.org/news.htm

Skywarn Spotter's Guide:

http://www.nws.noaa.gov/os/brochures/SGJune6-11.pdf

NOAA National Severe Storms Laboratory, Tornado Research:

http://www.nssl.noaa.gov/research/tornadoes/

More information will be added as it becomes known or available.

Acknowledgements:

Our sincere appreciation is expressed to all the survivors, friends and relatives who helped provide material and information for commemoration of this devastating event.

We also appreciate the following contributors to this project. We especially thank Jim du Bois for digitizing the radar images, and Alyson Jubert for creating the excellent animation. It was not an easy task.

Kenny Blumenfeld, Minnesota State Climatology Bill Borghoff, Lead Forecaster, NWS Chanhassen, MN Pete Boulay, Minnesota State Climatology Alyson Jubert, Eyetography, Inc Shawn DeVinny, Forecaster, NWS Chanhassen, MN Bill Doms Jim du Bois, President/CEO, Minnesota Broadcasters Association Chris Franks, Lead Forecaster, NWS Chanhassen, MN Dorothy Gargaro, President Pro Tem, Fridley Historical Society Tom Hultquist, Science Operations Officer, NWS Chanhassen, MN Andy Lahr, Meteorologist Intern, NWS Chanhassen, MN Dan Miller, Science Operations Officer, NWS Duluth, MN Mark Seeley, Professor, Dept of Soil, Water & Climate, University of Minnesota Greg Spoden, Minnesota State Climatology Allen Taylor, Author of "The Night The Sirens Blew" and "Hidden Revealed" Justin Wenzel John Wetter

Todd Krause Warning Coordination Meteorologist NWS Chanhassen, MN May 6, 2015